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## **A qualitative investigation of the experience of self-criticism in a student population**

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# **Volume I**

## **SYSTEMATIC LITERATURE REVIEW MAIN RESEARCH PROJECT**

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Thesis submitted in partial fulfilment for the degree of Doctorate in Clinical Psychology  
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## **Systematic Literature Review**

**The role of self-criticism in common mental health difficulties in students: a systematic review of prospective studies**

First supervisor: Dr Katharine Rimes

Second supervisor: Dr Patrick Smith

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## **Abstract**

### *Objectives*

Self-criticism is a trans-diagnostic construct that has been receiving considerable research and clinical attention. The purpose of this systematic review was to explore whether there is evidence from prospective studies that self-criticism is significantly associated with subsequent symptoms of psychopathology in students.

### *Methods*

To identify studies for inclusion in this systematic review, searches were carried out in four electronic databases: PsychInfo, Embase, Medline and The Web of Science Core Collection. Inclusion criteria specified a prospective design, a student sample, valid and reliable measurement of self-criticism and symptoms of a common mental health disorder and publication in a peer-reviewed journal. The methodological quality of the included studies was assessed and data was extracted and synthesised.

### *Results*

Sixteen studies were identified, twelve of which explored the relationship between self-criticism and subsequent depressive symptomatology. The remaining studies investigated social anxiety (n=1), depression and anxiety (n=2) and depression and terrorism-related perceived stress (n=1). In terms of depression, all identified studies found a significant relationship, with moderate to strong effect sizes, between self-criticism and subsequent symptoms. Eight (of the twelve studies that tested this) observed self-criticism, with weak to moderate effect sizes, to significantly predict an increase in symptoms over time. In terms of anxiety, all three studies found a significant relationship, with weak to moderate effect sizes, between self-criticism and subsequent symptoms, while none observed an increase in symptoms. The one study of terrorism-related perceived stress found a significant relationship and an increase in symptoms, with weak effect sizes, between self-criticism and subsequent psychopathology. The methodological quality of studies ranged from fair to good, with study attrition, and its subsequent consideration in the analysis process, being a primary methodological flaw. The use of the Depressive Experiences Questionnaire (DEQ) to

measure self-criticism was also problematic as this scale was designed to measure self-critical depression and includes items about depression.

### *Conclusions*

This systematic review provides some evidence that there is a significant prospective relationship between self-criticism and symptoms of psychopathology amongst a student sample, with the strongest evidence for depression. Recommendations were made to carry out prospective research exploring the effects of self-criticism on symptoms of other mental health problems in students, to consider alternative measures of self-criticism and to improve the methodological quality of studies especially in terms of study attrition.

## **1. Introduction**

### **1.1 Self-criticism**

Highly self-critical individuals tend to engage in frequent and harsh self-scrutiny and evaluation (Blatt, 2004; Shahar et al., 2011). Self-critical individuals tend to be sensitive to disapproval or criticism from others, competitive and judgmental towards themselves and others (Blatt, D’Afflitti & Quinlan, 1976) and achievement oriented (Blatt & Zuroff, 1992). Self-criticism is associated with more self-presentation goals and fewer interpersonal goals (Mongrain & Zuroff, 1995). A negative association has also been found between self-criticism and self-reported goal-progress (Powers, Milyavskaya & Koestner, 2012). In addition, individuals who are self-critical are more likely to negatively appraise achievement related events (Mongrain & Zuroff, 1989), demonstrate heightened ambivalence (Mongrain & Zuroff, 1994) and to exhibit self-defeating behaviours (Sherry, Stoeber & Ramasubbu, 2016). Self-criticism is also associated with increased negative affect and reduced positive affect (Mongrain & Zuroff, 1995).

### **1.2 Self-criticism as a vulnerability factor for psychopathology**

Not only does self-criticism have a negative effect on day-to-day mood and affect, several theoretical models suggest that it may be a vulnerability factor for depression and other mental health disorders. One theory that appears frequently in the literature is Blatt’s theory of depressive personality style, which suggests that self-criticism is one of two personality styles (the second being dependency) that predisposes people to depression (Blatt & Zuroff, 1992). Similar suggestions about the role of premorbid personality characteristics have been made from researchers from a cognitive behavioural theoretical orientation. For example, Beck’s (1983) model suggested that two broad cognitive structures “autonomy” and “sociotropy”, predispose individuals to developing depression. Autonomy includes a focus on meeting very high standards in order to maintain high self-esteem, and self-critical thinking occurs when it is perceived that the standards have not been met.

There is some overlap between self-criticism and other constructs, such as perfectionism and low self-esteem. For instance, models of eating disorders and social anxiety tend to include the 'unhealthy' aspects of perfectionism that include self-critical thinking (Bastiani, Rao, Weltzin & Kaye, 1995; Dunkley, Zuroff & Blankstein, 2006; Fairburn, Cooper & Shafran, 2003; Juster et al., 1996; Saboonchi, Lundh & Ost, 1999). Self-critical thinking is also considered a core component in Fennell's model of low self-esteem, which is often viewed as being a vulnerability factor for psychological distress (Fennell, 1998; Leary, Schreindorfer & Haupt, 1995; Zeigler-Hill, 2011). In the above-mentioned models, self-criticism also appears to act as a maintaining factor for psychopathology. Thus, it may be that self-criticism acts as both a predisposing and maintaining factor in psychopathology and may best be considered as a trans-diagnostic process.

### **1.3 Self-criticism as a trans-diagnostic process**

Findings from cross-sectional studies of self-criticism have been implicated in a range of psychopathologies, including depression, social phobia, eating disorders and post-traumatic stress disorder. This suggests that self-criticism may be a trans-diagnostic process. For instance, compared to never depressed controls, self-criticism is higher amongst both currently and remitted depressed individuals (Ehret, Joormann & Berking, 2015). Similarly, amongst both depressed patients and college students, self-criticism has been observed to account for a significant amount of variance in measures of depression beyond that accounted for by neuroticism (Clara, Cox & Enns, 2003). Mothers with post-partum depression have also been found to have significantly higher levels of self-criticism (Vliegen & Luyten, 2009). Self-criticism is not unique to depression, however; for instance, Luyten and colleagues (2007) observed that self-criticism did not differ between depressed and mixed psychiatric patients. Additionally, social phobia patients have been found to have higher scores of self-criticism than healthy controls (Cox et al., 2000; Iancu, Bonder & Ben-Zion, 2015) and self-criticism can predict scores on the Liebowitz social anxiety scale (Iancu et al., 2015). There is also evidence of an association between self-criticism and post-traumatic stress disorder. For instance, Cox and colleagues (2004) observed that elevated

levels of self-criticism (and neuroticism) were significantly associated with PTSD among men and women who experienced one or more traumatic events. Moreover, Sharhabani, Amir and Swisa (2005) found that a self-critical personality style was associated with PTSD intensity among victims of domestic violence. Self-criticism is also associated with eating disorders, with evidence that both anorexic and bulimic patients, in particular, score higher than controls on measures of self-criticism (Speranza et al., 2003). Similarly, amongst day and inpatient eating disorder patients, Kelly and Carter (2013) found higher self-criticism to be associated with elevated eating disorder pathology through feelings of shame. Other forms of psychopathology that have been associated with self-criticism include bipolar disorder (Francis-Raniere, Alloy & Abramson, 2006), suicidality (Clara, Cox & Enns, 2004; Faaza & Page, 2003) and self-injurious behaviour (Glassman, Weierich, Hooley, Deliberto & Nock, 2007).

#### **1.4 Type of evidence**

Clearly, there is substantial evidence from cross-sectional studies that self-critical thinking is elevated in people with psychological problems. However, cross-sectional studies are not able to identify any direction of causality and hence the results are open to interpretation. More specifically, it is not possible to know whether the self-criticism is a characteristic or result of the disorder rather than having any aetiological, maintenance or relapse contribution. There is now an increasing number of studies investigating the longitudinal relationship between self-criticism and/or related constructs and psychopathology. This longitudinal design cannot directly test causality. However, researchers have argued that if self-criticism is associated with subsequent clinical symptomatology, this indicates that it is unlikely to simply be the result of psychological disorder. Indeed, if baseline levels of symptomatology are controlled for in the analysis, this indicates that self-criticism may have a contributory role in the maintenance or increase in psychological problems.

#### **1.5 Rationale for current systematic review**

Considering the trans-diagnostic nature of self-criticism, alongside the limitations of the cross-sectional research highlighting its association with psychopathology, it is important to

determine the strength of any longitudinal associations. To date, no systematic reviews have been identified of prospective studies, which explore the relationship between self-criticism and subsequent symptoms of common mental health difficulties. If the evidence suggests that self-criticism is associated with subsequent levels of psychopathology, it may be an important factor to target for intervention, particularly early intervention or relapse prevention. One particular population that may benefit from early intervention is students. This review, therefore, focuses exclusively on studies involving student samples. There are several additional reasons for this. First, student mental health is becoming an increasing concern across the globe with a growing number of students seeking psychological support (e.g. Kitzrow, 2003; Gallagher, 2011). This suggests a need to identify potential vulnerability factors in this population. Second, there is evidence of high levels of perfectionism in academic settings (Arpin-Cribbie et al., 2008), with unhealthy perfectionism predicting subsequent fatigue and depression following a period of academic stress in first year undergraduate students (Dittner, Rimes & Thorpe, 2011), as well as being associated with depression and anxiety (Kawamura et al., 2001). Given that self-criticism appears to be a central feature in unhealthy perfectionism, as previously mentioned, further understanding of its effect on student mental health is important. Thirdly, evidence suggests that there are comparable rates of psychiatric disorders amongst students and non-students (Blanco et al., 2008), hence, findings may also be of relevance to non-student populations. Lastly, since students tend to be a relatively homogenous group in terms of characteristics such as age, socioeconomic status, stressors, findings from this review may be subject to fewer potential confounders, making the results easier to interpret. The purpose of this systematic review is, therefore, to explore whether there is evidence from prospective studies that self-criticism is associated with subsequently higher levels of symptoms of psychopathology amongst students.

## 2. Method

### 2.1 Search strategy

Four databases were used to search for potentially relevant studies: OvidSP (PsychInfo, Embase Classic and Embase, Medline) and The Web of Science Core Collection. The following limits were applied to each of the searches where applicable: abstracts, human, English language, adulthood >age 18. The initial search took place in June 2015 and an updated search was carried out in April 2017.

### 2.2 Search terms

The search terms used were:

“self-critic\*” OR “self evaluat\*” OR “self jud\*” OR “self attitude\*” OR “inner critic” OR  
“negative self statement” OR “self appraisal” OR “self assessment” OR “self denigrat” OR  
“self critical perfectionis\*” OR “dysfunctional perfectionis\*” OR “maladaptive perfectionis\*”  
OR “negative perfectionis\*” OR “unhealthy perfectionis\*” OR “evaluative concern\*” OR  
“maladaptive concern\*” OR “perfectionist concern\*” OR “concern\* over mistake\*”

AND

Psychopathology OR mental disorder OR psychiatric symptom\* OR psychological disorder\*  
OR psychological difficult\* OR common mental health problem\* OR affective disorder\* OR  
mood disorder\* OR major depress\* OR depress\* OR low mood OR dysthymi\* OR anxiety  
disorder\* OR phobi\* OR acrophobia OR agoraphobia OR claustrophobia OR ophidiophobia  
OR social phobia OR social anxiety OR generalised anxiety disorder OR GAD or obsessive  
compulsive disorder OR obsessions OR compulsions OR OCD or panic disorder OR panic  
attack\* OR post traumatic stress disorder OR acute stress disorder OR PTSD OR eating  
disorder\* OR anorexi\* OR bulimi\* OR binge eating OR eating pathology OR eating disorder  
not otherwise specified OR EDNOS

AND

Prospective\* OR longitudinal\* OR premorbid OR predict\* OR track\* OR anteceden\* OR  
cohort OR incidence OR outcome OR “follow up” OR risk factor” OR “at risk” OR “before and  
after”

## **2.3 Selection criteria**

The inclusion and exclusion criteria are outlined below:

### **2.3.1 Inclusion**

- 1) Prospective studies investigating self-criticism and subsequent levels of psychopathology among common mental health problems. The mental health disorders considered were depression, anxiety disorders (generalised anxiety disorder, phobia, panic disorder, OCD and social anxiety), PTSD, and eating disorders (anorexia, bulimia, binge eating and eating disorders not otherwise specified).
- 2) Self-criticism is measured using a valid and reliable self-report or interview based measure. If this is assessed as part of a measure of a broader construct such as depression, low self-esteem or perfectionism, self-criticism must have been reported as a separate sub-component in its own right.
- 3) Studies with an adult student sample.
- 4) Psychopathology is measured using a valid and reliable self-report or interview based measure.
- 5) Published in a peer-reviewed journal.

### **2.3.2 Exclusion**

- 1) Intervention studies.
- 2) Studies where all participants have an existing psychiatric diagnosis.
- 3) Self-criticism is not measured independently to psychopathology, or as a distinct component of broader constructs such as self-esteem or perfectionism.
- 4) Studies not written in English.
- 5) Commentaries, reviews, editorials, posters and unpublished dissertations.

## **2.4 Selection process**

Once the initial search was carried out, the references were exported into EndNote and then into Excel. The titles and abstracts were screened by the main author and full-texts were sourced for any potentially relevant studies.



## **2.5 Data extraction**

See Table 1 for the data that was extracted from the included studies.

## **2.6 Quality assessment**

The methodological quality of the included studies was assessed using criteria from a checklist for the reporting of observational longitudinal research developed by Tooth, Ware, Bain, Purdie and Dobson (2004) (See Table 1). This checklist was specifically created to assist authors, editors and readers of longitudinal research assess any threats to internal or external validity of studies. The specific criteria used in the current research, focused on descriptive issues relevant to the study rationale, study population and generalisability, data collection, study completion/attrition and data analysis. Ratings were made on a 0, 1, 2 bases, where 0 = not present/poor, 1 = partially present/fair, and 2 = present/good. The overall score was categorised as poor (0-10), fair (11-20), adequate (21-25) and good (26-30). The methodological quality of the included studies is summarised in Table 3. Five of the included studies were independently evaluated by a second trainee clinical psychologist. The strength of the agreement between the two assessors was 'very good' ( $k = 0.82$ ,  $p < .005$ ) (Altman, 1999). Minor discrepancies were resolved through discussion until a consensus was reached for the reported rating.

Table 1: Quality assessment tool

Criterion	Not present/ poor (0)	Partially present/ fair (1)	Present/ good (2)
<b>Study population and participation</b>			
1. Are the objectives or hypotheses clearly stated?			
2. Is there an adequate description of sampling frame, recruitment methods, period of recruitment and place of recruitment?			
3. Is there an adequate description of the study sample e.g. number, age, sex?			
<b>Data collection</b>			
4. Is there an adequate description of methods of data collection i.e. tools and processes?			
5. Is the exposure measure i.e. self-criticism, clearly defined, valid, reliable and implemented consistently across all study participants?			
6. Is the outcome measure i.e. depression, clearly defined, valid, reliable and implemented consistently across all study participants?			
<b>Study attrition</b>			
7. Is the number of participants at each stage/wave specified?			
8. Is information on follow-up duration provided?			
9. Is loss to follow-up after baseline 20% or less?			
<b>Data analyses</b>			
10. Are 'longitudinal' methods of analysis stated?			
11. Are effect sizes (absolute, relative) reported?			
12. Is loss to follow-up taken into account in the analyses?			
13. Are confounders accounted for in the analyses?			
14. Are missing data accounted for in the analyses?			
15. Did authors relate results back to a target population?			
SCORE			

### **3. Results**

#### **3.1 Selection of studies**

A PRISMA flowchart highlights the selection process for this review (See Figure 1). In total, 16 papers were identified for inclusion in this review.

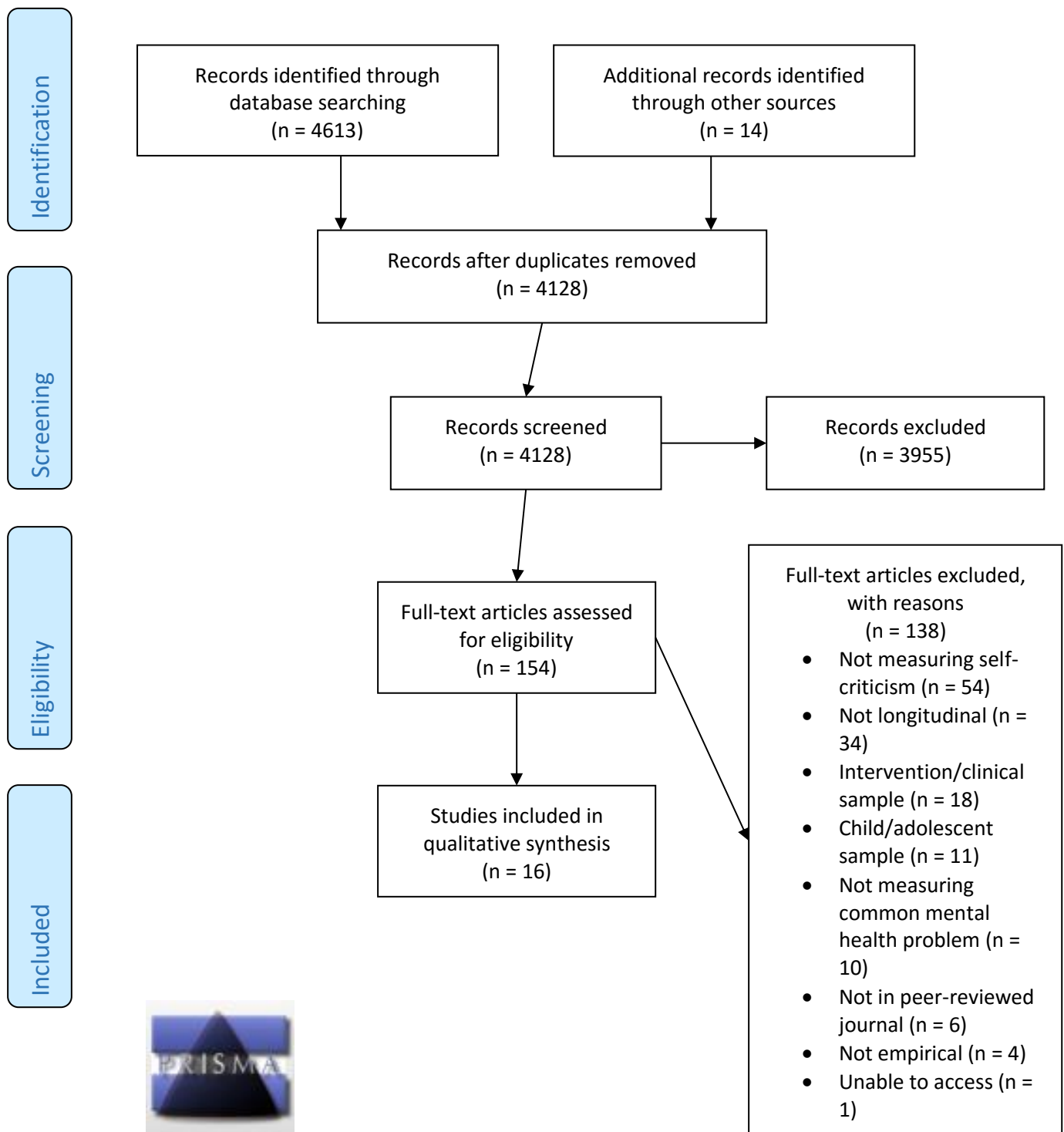


Figure 1: PRISMA flow chart

Table 2: Study characteristics and data extracted

Reference	Country	Assessment period	Sample	Completion/ attrition	Main outcomes	Measure of self-criticism	Measure of psycho-pathology	Control for T1 psycho-pathology	Analyses	Results
Brewin & Firth-Cozens (1997)	United Kingdom	T1: baseline; T2: 2 years; T3: 10 years	318 4th year medical students; Age range: 20-37 years, M: 22.4 years; 186 male, 126 female, 6 unknown	T1: 318; T2: 170 out of 238 (72%); T3: 224 out of 302 (74.2%)	Depression	DEQ (5 items)	SCL-90 (depression subscale)	Yes, in regression model	Correlations*  Multiple hierarchical Regression (Analysis 1 - Block 1: T1 depression; block 2: self-criticism, dependency and workload; dependent variable: T2 depression. Analysis 2 – as per analysis 1 but separately for males and females)	T2: $r = .44$ , $p < .001$ ; T3: $r = .25$ , $p < .001$ ;  From Analysis 1 - T1 SC predicts T2 and T3 depression: T2: $B = .39$ , $t(164) = 5.10$ , $p < .001$ ; T3: $B = .21$ , $t(211) = 2.96$ , $p < .01$  From Analysis 2 – T1 SC predicts T2 and T3 depression for men: T2: $B = .47$ , $t(195) = 5.05$ , $p < .001$ ; T3: $B = .27$ , $t(127) = 3.15$ , $p < .01$  From Analysis 2 – T1 SC predicts T2 but not T3 depression for women: T2: $B = .33$ , $t(64) = 2.13$ , $p < .05$ T3: largest $B = .18$ , largest $t(77) = 1.47$ , $p > .10$

Gautreau, Sherry, Mushquash & Stewart (2015)	Canada	T1: baseline; T2: 193.89 (SD: 22.97) days after T1; T3: 186.34 (SD: 32.43) days after T2	301 undergraduate students; Mean age: 20.87 years, SD: 4.08 years; 71% female; 90% Caucasian	T1: 301; T2: 252(83.7%); T3: 218 (72.4%)	Social anxiety	DEQ (5 items)	SIAS; SPS & LSAS	Yes, in structural equation model	Bivariate correlations*  Cross-lagged structural equation modelling**	T2 SIAS: $r = .46, p < .001$ ; T2 SPS: $r = .32, p < .001$ ; T2 LSAS-A: $r = .35, p < .001$ ;  T3 SIAS: $r = .45, p < .001$ ; T3 SPS: $r = .37, p < .001$ ; T3 LSAS: $r = .41, p < .001$ ;  T1-T2: $b = .07, p > .05$ T2-T3 : $b = .07, p > .05$
Kopala-Sibley, Zuroff, Hermanto & Joyal-Desmarais (2015)	Canada	T1: baseline; T2: 12 months	82 emerging adulthood participants (+ closest friend) largely drawn from university pool; Age range: 18-20 years, M: 19 years, SD 0.75 years; 13 male; 60.8% Caucasian	T1: 115 completed baseline measures, 82 friends completed measures; T2: 67% completed measures of self-criticism, 58.5% completed measures of depression, 90.2% reported romantic relationship status	Depression	DEQ	BDI-II	Yes, in structural equation model	Bivariate correlations*  Cross-lagged structural equation modelling**	$r = .36, p < .01$  Significant negative effect of T1 self-criticism on T2 depression (Result not reported)

Lassri, Soffer-Dudek, Lerman, Rudich & Shahar (2013) (Study 1)	Israel	T1: baseline 1 year prior to Oferet Yetzok (3 weeks of sustained missile attacks); T2: 2 weeks after Oferet Yetzok had ended	67 undergraduates; Age range: 22-34 years, M: 24.78 years, SD: 1.98 years; 59 female, 8 male	T1: 91; T2: 67 (73.6%)	Terrorism-related perceived stress; depression	DEQ	7-point Likert scale assessing terrorism-related stress; BSI	Yes, in GLM model	Correlation*  General linear modelling (Step 1: terrorism-related exposure, self-criticism, T1 psychopathology; step 2: two-way interactions with terrorism related exposure variables, self-criticism and baseline psychopathology; step 3: three-way interactions as per step 2; dependent variable: T2 psychopathology)	r = .35, p < .01  From step 2: T1 SC predicts T2 psychopathology under high but not low levels of stress-related exposure: High stress b = .33, S.E. = .13, B = .61, t = 2.61, p < .01; Low stress: b = -.21, S.E. = .16, B = -.40, t = -1.36, ns  From step 3: No significant three-way interactions associating self-criticism with subsequent psychopathology were observed (Results not reported)
Liu, Chen, Tsai, Wu & Hong (2012)	Taiwan	T1: baseline; T2: 6 months	84 college students; Age range: 18-24 years; M: 19.39 years; SD: 1.31 years; 89% female	T1: 84 completed baseline questionnaires, 79 completed event-contingent reporting; T2: 77 completed follow-up questionnaires, 75 completed event-contingent reporting	Depression	DEQ	BDI-II (Chinese version)	Yes, in structural equation model and in mediational analysis	Cross-lagged structural equation modelling**  Mediational analysis	T1-T2: b = .369, p < .05  T1 SC predicted T2 depression mediated by interpersonal behaviours: B = .06, SE = .03, 95% BCa CI = .01 TO .10

McGrath, Sherry, Stewart, Mushquash, Allen, Nealis & Sherry (2012)	Canada	T1: baseline; T2: 1 week; T3: 2 weeks; T4: 3 weeks	240 undergraduate students enrolled in psychology courses; Mean age: 20 years; SD: 3.23 years; 83% female; 86.7% White; 47.5% single	T1: 240; T2: 238(96.7%); T3: 230(95.4%); T4: 232 (93.4%)	Depression	DEQ-SF (5 items)	CES-D-SF; DACL-G-SF & SCL-R-D	Yes, in structural equation model	Bivariate correlations*  Cross-lagged structural equation modelling**	T2: $r = .54, p < .001$ ; T3: $r = .45, p < .001$ ; T4: $r = .47, p < .001$ ;  T1-T2: $b = .06, p > .001$ T2-T3: $b = .38, p < .001$ T3-T4: $b = .38, p < .001$
Peleg-Sagy & Shahar (2015) (Study 1)	Israel	T1: baseline; T2: 1 year	194 medical students from 1st, 4th & 7th year; Age range: 21-34 years, M: 26.56 years, SD: 2.57 years); 100% female	T1: 194; T2: 145 (74.7%)	Depression	DEQ	CES-D; BDI-II (averaged score)	Yes, in regression model	Correlation*  Multiple hierarchical regression (Block 1: T1 self-criticism, self-concept clarity, silencing the self and baseline of all outcome variables; block 2: two-way interactions Between 3 self variables; block 3: three-way interactions as per block 2; dependent variable: T2 depression, sexual dissatisfaction, dyadic adjustment, physical symptoms)	$r = .42, p < .00$  From block 1: SC did not significantly predict depression at T2 (Result not reported)  From block 2 and 3: No significant two-way or three way interactions associating self-criticism with subsequent depression were observed (Results not reported)



Priel & Shahar (2000)	Israel	T1: baseline; T2: 9 weeks	182 young adults (university college and military academy); Age range: 18-48 years, M: 23 years; 117 women, 65 men	Not reported	Depression	DEQ	CES-D	Yes, in both regression model and structural equation model	<p>Correlation*</p> <p>Multiple hierarchical regression (Block 1: T1 distress, social support, interpersonal, achievement and other stress, sex; block 2: T1 self-criticism and dependency; block 3: T2 social support and 3 types of stress; block 4: two-way interactions (x11); block 5: higher order interactions (x6); dependent variable: T2 distress)</p> <p>Structural equation modelling**</p>	<p><math>r = 0.61, p &lt; .05</math>;</p> <p>From block 2: T1 SC predicts T2 distress: <math>R\text{-squared} = .04, F = 26.86, df = 8, 172, F \text{ change} = 7.21, B = 0.25, p &lt; .000</math></p> <p>T1-T2: <math>b = .17, p &lt; .05</math></p>

Shahar (2006)	Israel	T1: baseline (1 week prior to exam); T2: 8 weeks	260 1st year undergraduate students from a research university (n = 90) and a liberal arts college (n = 170); Age range: 19.5-29.7 years, M: 23.15, SD: 3.67 years; 171 women, 89 men	Not reported	Depression	PSI	BDI; CES-D; SRDS	Yes, in regression model	Multiple hierarchical regression (Step 1: gender, T1 depression, self-critical perfectionism, sociotropy, stress; Step 2: two-way interactions between vulnerability factors and i) stress and ii) T1 depression; Step 3: three-way interactions as per step 2; dependent variable: T2 depression)	SC did not significantly predict depression at T2 (Result not reported)  From step 3: self-critical perfectionism interacted with T1 depression and subsequent stress to predict T2 depression: $R^2 = .39$ , $F(11,194) = 9.02$ , $p < .001$
Sherry, Nealis, Macneil, Stewart, Sherry & Smith (2013)	Canada	T1: baseline; T2: 28 days	155 undergraduate students (+ 588 friends/family members); 119 women; Mean age: 20.65 years, SD: 3.03; 70.3% of European descent	T1: 155 (100%); T2: 152 (98.1%)	Depression	DEQ (9 items); F-MPS-CM; HF-SP	DASS-D	Yes, in regression model	Bivariate correlations*  Multiple hierarchical regression (Panel 1 - Step 1: T1 depression; step 2: T1 self-critical perfectionism (self-report); step 3: T1 self-critical perfectionism (informant report);	Self-report: $r = .42$ , $p < .001$ ; Informant report: $r = .32$ , $p < .001$  Panel 1 - T1 SC predicts T2 depression: From step 2: Self-report: $B = .19$ , $\Delta R^2 = .02$ , $\Delta F = 4.95$ , $p < .05$ From step 3: Informant-report: $B = .19$ , $\Delta R^2 = .03$ , $\Delta F = 6.66$ , $p < .05$  Panel 2 - T1 SC predicts T2 depression:

									dependent variable: T2 depression. Panel 2 – as per panel 1 except informant-report in step 2 and self-report in step 3)	From step 2: Informant-report: $B = .24$ , $\Delta R$ squared = .06, $\Delta F = 11.12$ , $p < .001$ From step 3: Self-report: $B = .19$ , $\Delta R$ squared = .02, $\Delta F = 4.95$ , $p < .05$
Sherry, Richards, Sherry & Stewart (2014)	Canada	T1: baseline; T2: 6 months; T3: 12 months	302 undergraduate psychology students; Mean age: 20.84 years; 219 female; 90.1% Caucasian	T1: 302; T2: 83.4%; T3: 72.2%	Depression, anxiety	DEQ-SF (9 items); HF-MPS-SP; F-MPS-CM & F-MPS-DA (composite score of 4 measures)	MASQ	Yes, in structural equation model	Bivariate correlations*  Cross-lagged structural equation modelling**	T2 depression: $r = .56$ , $p < .05$ ; T3 depression: $r = .49$ , $p < .05$ ; T2 anxiety: $r = .21$ , $p < .05$ ; T3 anxiety: $r = .25$ , $p < .05$  T1-T2 depression: $b = .16$ , $p < .05$ T2-T3 depression: $b = .15$ , $p < .05$ T1-T2 anxiety: $b = .05$ , $p > .05$ T2-T3 anxiety: $b = .05$ , $p > .05$
Shulman, Kalnitzki & Shahar (2009)	Israel	T1: baseline; T2: 1 year	236 emerging adults attending preparatory academic programs; Mean age: 23.04, $SD = 1.76$ ; 115 men, 121 women	T1: 236; T2: 175 (74.2%)	Depression, anxiety	DEQ	BSI	Yes, in regression model	Correlation*  Multiple hierarchical regression (Step 1: gender; step 2: T1 depression, anxiety, amotivation, educational	T2 depression: $r = .46$ , $p < .05$ ; T2 anxiety: $r = .37$ , $p < .01$ ;  From step 3: T1 SC predicts T2 depression but not anxiety: Depression: $B = .17$ , $SE = .07$ , $B = .14$ , $\Delta R$ squared = .03, $p < .05$ ;

									success and goals, goal pursuit; step 3: self-criticism, efficacy; step 4: maternal, paternal and friend support; step 5: putative index; step 6: interactions between academic success/failure and goal adjustment, personality, gender; dependent variable: T2 depression, anxiety, amotivation, educational success and goals, goal pursuit)	Anxiety: $B = .06$ , $SE = .066$ , $B = .05$ , $\Delta R^2 = .00$ , $p > .05$
Spasojevic & Alloy (2001)	United States	T1: baseline; then every 6 weeks for 2.5 years	137 1st year undergraduate students (subset from larger project); Age range: 16-29 years, M: 19 years; 88 women, 49 men; 62.8% Caucasian, 25.5%	Not reported	Depression	DEQ	Modified SADS-C (diagnostic)	No	Correlation*  Multiple hierarchical regression (Analysis 3 of 6: Step 1: self-criticism; step 2: rumination; step 3: self-criticism with rumination)	$r = .35$ , $p < .001$  From step 1, 2 and 3: T1 SC predicts subsequent depression, mediated by rumination: $t(129) = 3.23$ , $p < .01$ , $B = .27$ ; $t(128) = 1.34$ , $p = .18$ , $B = .13$ ;

			African American, 4.4% Hispanic, 4.4% Asian & 2.9% Other							
Sturman, Rose, Keighan, Burch & Evanico (2015)	United States	T1: baseline; T2: 7 weeks	163 undergraduate psychology students; mean age: 20.02 years, SD: 4.97 years; 46 male, 117 female; 85.89% White, 4.9% African American, 2.45% Asian & 2.45% Hispanic	T1: 163; T2: 94 (57.67%)	Depression	DEQ	CES-D	Yes, in regression model and in structural equation model	Correlation*  Multiple hierarchical regression (Step 1: T1 depression, involuntary subordination, defeating events; step 2: self-criticism; dependent variable: T2 depression, involuntary subordination, defeating events)  Cross-lagged structural equation modelling**	r = .53, p < .001  From step 2: SC did not significantly predict depression at T2 (Result not reported)  T1-T2: b = .42, p = .001
Yao, Fang, Zhu & Zuroff (2009)	China	T1: baseline; T2: 6 months	640 2nd or 3rd year undergraduate Chinese students; Age range: 17-23 years, M: 20.1 years, SD: 1.1 years; 343 females, 297 males; 93.1% Han	Not reported	Depression	DEQ (Chinese version)	CES-D	Yes, in regression model	Multiple hierarchical regression (Step 1: T1 depression; step 2: dependency, self-criticism and efficacy; step 3: two-way interactions	From step 2: T1 SC predicts T2 depression: Total sample: B = .23, t = 4.76, p < .01; Males: B = 0.27, t = 3.71, p < .01; Females: B = 0.16, t = 2.39, p < .05

			Chinese, 6.9% ethnic minority						between dependency, self-criticism and efficacy; step 4: three-way interactions as per step 3; dependent variable: T2 depression)	From step 3: No significant two-way interaction between dependency and self-criticism ( $B = -.01$ , $t = -.03$ , $p > .97$ ) or between efficacy and self-criticism ( $B = .01$ , $t = 0.12$ , $p = .90$ ) was observed.  From step 4: No significant three-way interaction between dependency, self-criticism and efficacy was observed ( $B = .02$ , $t = .39$ , $p > .69$ )
Zuroff, Igeja & Mongrain (1990)	Canada	T1: 1-2 months; T2: 12 months	66 undergraduate students; 100% female	T1: 66; T2: 46 (73%)	Depression	DEQ	Retrospective BDI; "worst period" description rated using 7-point scale for 18 adjectives measuring anacritic and introjective state depression	Yes, in regression model	Multiple hierarchical regression (Analysis 2 - Step 1: T1 BDI; step 2: T1 dependency and self-criticism; step 3: two-way interaction between dependency and self-criticism; dependent variable: "worst period" measures)	From step 2: T1 SC did not significantly predict T2 depression as measured by BDI (Result not reported)  From step 2: T1 SC predicts introjective state depression: $F(1,40) = 4.7$ , $p < .05$ , increment in R-squared = 7.5  No significant two-way interaction was observed (Result not reported)

**Key:** DEQ = Depressive Experiences Questionnaire; PSI = Personal Style Inventory; HF-MPS-SP = Hewitt & Flett -Multi-dimensional Perfectionism Scale Socially Prescribed subscale; F-MPS-CM = Frost-Multi-dimensional Perfectionism Scale Concern Over Mistakes subscale; F-MPS-DA = Frost-Multi-dimensional Perfectionism Doubts About Actions subscale; SCL-90 = The Symptom

Checklist-90; BDI = Beck Depression Inventory; CES-D = Centre for Epidemiological Studies Depression Scale; SADS = Schedule for Affective Disorders and Schizophrenia; BSI = Brief Symptom Inventory; DACL-G-SF = Depression Adjective Checklist Form G Short Form; SCL-R-D = Symptom Checklist - Revised Depression Scale; SRDS = The Self-Report Depression Scale; DASS-D = Depression Anxiety Stress Scale; MASQ = Mood and Anxiety Symptoms Questionnaire; SIAS = Social Interaction Anxiety Scale; SPS = Social Phobia Scale; LSAS-A = Liebowitz Social Anxiety Scale

\*Refers to relationship between T1 (or other prior time-point) self-criticism and subsequent psychopathology

*\*\*Refers to relationship between T1 (or other prior time-point) self-criticism and subsequent psychopathology having adjusted for T1 (or other prior time-point) levels of psychopathology*

## **3.2 Characteristics of included studies**

### **3.2.1 Setting**

Studies were carried out in a range of different countries, with Canada (n=6) being the most common, followed by Israel (n=5) and the United States (n=2); one study each was carried out in the United Kingdom, Taiwan and China. There was some overlap between studies with the same author(s) involved in several studies. One author was involved in all five studies carried out in Israel; one author from two of the Canadian studies was involved in the Chinese study; and two or three authors were involved in each of the remaining four Canadian studies.

### **3.2.2 Sample**

A total of 3,427 target participants were included in the reviewed studies. Sample sizes ranged from 66 participants (Zuroff et al., 2015) to 640 participants (Yao et al., 2009). Samples comprised undergraduate university students (n=12), medical students (n=1) and emerging/young adults attending some form of academic programme (n=3). All studies had a predominantly female sample, with two studies consisting of an entirely female sample (Peleg-Sagy & Shahar, 1990; Zuroff et al., 2015). Nine of the sixteen studies explicitly reported the ethnicity of participants with Caucasian most commonly reported (n=8).

### **3.2.3 Longitudinal design**

The majority of studies involved two time-points (n=10), while studies with three time-points (n=3), four time-points (n=1) and more than 4 time-points (n=2) were less common. In relation to time-frame, most studies ranged from 6 to 12 months in duration (n=8), while fewer studies were less than 6 months (n=4) or more than 12 months in duration (n=4). The shortest time-frame was just 7 weeks (Sturman et al., 2015) and the longest time-frame was 10 years (Brewin & Firth-Cozens, 1997). Looking at the retention of participants over time, only five studies retained at least 80% of participants by T2 (Gautreau et al., 2015; Liu et al., 2012; McGrath et al., 2012, Sherry et al., 2013 & Sherry et al., 2014) and only one study retained at least 80% of participants by T3 and T4 (McGrath et al. 2012). Four studies did not report their retention/attrition rates (Priel & Shahar, 2000; Shahar, 2006; Spasojevic &



Alloy, 2001; Yao et al., 2009). Thus, seven studies had more than 20% loss to follow-up by T2 and three studies had more than 20% loss to follow-up by T3.

#### **3.2.4 Measurement of self-criticism**

With regard to the assessment of self-criticism, the most common measure used was the Depressive Experiences Questionnaire (DEQ) (Blatt, D'Afflitti & Quinlan, 1976) (n=15). Six studies specified using either the short-form of this measure or only using those items relating to self-criticism. One study used the Personal Style Inventory (PSI) (Robins et al., 1994), a revised measure of the Sociotropy and Autonomy Scale (SAS) (Beck, Epstein, Harrison & Emery, 1983) to measure self-criticism. In addition to the DEQ, two studies used several subscales of multi-dimensional perfectionism and developed a composite score of self-criticism based on these (Sherry et al., 2013; Sherry et al., 2014).

#### **3.2.5 Measurement of psychopathology**

In terms of outcome, the vast majority of studies were concerned with either depression on its own (n=12) or depression alongside anxiety (n=2) or terrorism-related stress (n=1). Only one study focused exclusively on a disorder other than depression, namely social anxiety (Gautreau et al., 2015). Only one study used a diagnostic measure, specifically the Schedule for Affective Disorders and Schizophrenia (SADS) (Endicott & Spitzer, 1978) (Spasojevic & Alloy, 2001), while most studies used one or more continuous measures. The two most commonly used continuous measures were the Centre for Epidemiological Studies – Depression Scale (CES-D) (Radloff, 1977) (n=6) and the Beck Depression Inventory (BDI/BDI-II) (Beck, Steer & Carbin, 1988; Beck, Steer & Brown, 1996) (n=6). Alongside the BDI, one study assessed anaclitic and introjective state depression by asking participants to describe a "worst period" and rate it on 18 adjectives using a 7-point Likert scale (Zuroff et al., 1990). Other depression-specific measures used were: The Depression Adjective Checklist Form G Short Form (DACL-G-SF) (Sherry & Hall, 2009) (n=1), Symptom Checklist - Revised Depression Scale (SCL-R-D) (Derogatis, 1994) (n=1), the Depression Anxiety Stress Scale (DASS-D) (Lovibond & Lovibond, 1995) (n=1) and The Self-Report Depression scale (SRDS) (Zung, 1965) (n=1). Depression was also measured using the more generic measure of the Symptom Checklist (SCL-90) (Derogatis, Lipman & Covi, 1973) (n=1). The Mood and Anxiety Symptoms Questionnaire (MASQ) (Watson et al., 1995) (n=1) and the Brief Symptom

Inventory (BSI) (Derogatis & Melisaratos, 1983) (n=2) were used to assess depression/anxiety and depression/terrorism-related perceived stress. In addition to the BSI, terrorism-related perceived stress was assessed using a single item rated on a 7-point Likert scale (Lassri et al., 2013). Finally, social anxiety was measured using three widely used measures, namely the Social Interaction Anxiety Scale (SIAS) (Mattick & Clarke, 1998), Social Phobia Scale (SPS) (Mattick & Clarke, 1998) and the Liebowitz Social Anxiety Scale (LSAS) (Liebowitz, 1987).

### **3.2.6 Data analysis**

All studies carried out correlational analyses to test whether there is an association between self-criticism and subsequent levels of psychopathology (n=16). In addition, some studies conducted multiple hierarchical regression analysis (n=9) or cross-lagged structural equation modelling (n=7) to determine the predictive effect of self-criticism on psychopathology. Mediation analysis (n=2) and general linear modelling were also reported (n=1).

## **3.3 Methodological quality of included studies**

The quality of studies included in this review were rated as fair (n = 4), adequate (n =6) and good (n =6) (See Table 3). All studies received present/good ratings for the criteria assessing the exposure (self-criticism) and outcome (psychopathology) measures and the statement of longitudinal methods of analyses. Almost all studies (n =15) received present/good ratings for the criteria assessing the statement of objectives/hypotheses, describing the sample and accounting for confounders in the analyses. More specifically, baseline psychopathology was accounted for in all but one study, which did not explicitly report this but it was suggested by the method of analysis. Overall, studies were least likely to meet criterion 9 ('is loss to follow-up after baseline 20% or less?'), with just three studies receiving a rating of present/good and two studies receiving a rating of partially present/fair (i.e. if attrition rates varied across different time-points). Related to this, half of the studies (n=8) received a rating of not present/poor for criterion 12 ('is loss to follow-up taken into account in the analysis?'). Half of the studies also received a rating of not present/poor for criterion 14 ('are missing data accounted for in the analyses?'), however, seven studies

received a rating of present/good for this criterion, increasing the overall score. All studies received a partially present/fair rating for criterion 2 ('is there an adequate description of sampling frame, recruitment methods, period of recruitment and place of recruitment?') with most not reporting information about the period (n = 16), followed by place (n = 4) or methods (n = 2). The criteria relating to follow up and missing data are especially important for determining the quality of longitudinal research and are likely to influence the validity of the results.

*Table 3: Methodological quality of included studies*

Reference	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Score
Brewin & Firth-Cozens (1997)	1	1	2	1	2	2	2	1	0	2	2	1	2	0	2	<b>21 Adequate</b>
Gautreau et al (2015)	2	1	2	2	2	2	2	2	1	2	2	0	1	2	2	<b>25 Adequate</b>
Kopala-Sibley et al. (2015)	2	1	2	2	2	2	2	2	0	2	2	1	2	2	2	<b>26 Good</b>
Lassri et al. (2013)	2	1	2	2	2	2	2	1	0	2	2	0	2	0	1	<b>21 Adequate</b>
Liu et al (2012)	2	1	2	2	2	2	2	2	2	2	2	0	2	2	2	<b>27 Good</b>
McGrath et al. (2012)	2	1	2	2	2	2	2	2	2	2	2	1	2	2	1	<b>27 Good</b>
Peleg-Sagy & Shahr (2015)	2	1	2	2	2	2	2	2	0	2	1	0	2	0	2	<b>22 Adequate</b>
Priel & Shahr (2000)	2	1	2	2	2	2	0	2	0	2	2	0	2	0	0	<b>19 Fair</b>
Shahr (2006)	2	1	2	2	2	2	0	2	0	2	1	0	2	1	0	<b>19 Fair</b>
Sherry et al (2013)	2	1	2	1	2	2	2	2	2	2	2	1	2	2	1	<b>26 Good</b>
Sherry et al. (2014)	2	1	2	2	2	2	2	2	1	2	2	2	2	2	1	<b>27 Good</b>
Shulman et al. (2009)	2	1	2	2	2	2	2	2	0	2	2	2	2	0	2	<b>25 Adequate</b>
Spasojevic & Alloy (2001)	2	1	2	2	2	2	0	2	0	2	2	0	2	0	1	<b>20 Fair</b>

Sturman et al. (2015)	2	1	2	2	2	2	2	2	0	2	2	2	2	2	1	<b>26</b> <b>Good</b>
Yao et al. (2009)	2	1	2	1	2	2	0	2	0	2	2	0	2	0	2	<b>20</b> <b>Fair</b>
Zuroff et al. (1990)	2	1	1	2	2	2	2	2	0	2	1	2	2	0	2	<b>23</b> <b>Adequate</b>
	<b>31</b>	<b>16</b>	<b>31</b>	<b>29</b>	<b>32</b>	<b>32</b>	<b>24</b>	<b>30</b>	<b>8</b>	<b>32</b>	<b>29</b>	<b>12</b>	<b>31</b>	<b>16</b>	<b>22</b>	

### 3.4 Findings from included studies

#### 3.4.1 *Is self-criticism associated with subsequent depressive symptoms?*

Fourteen studies observed a significant positive relationship between self-criticism at T1 and depression at T2 (Brewin & Firth-Cozens, 1997; Kopala-Sibley et al., 2015; Liu et al., 2012; McGrath et al., 2012; Peleg-Sagy & Shahar, 2015; Priel & Shahar, 2000; Shahar, 2006; Sherry et al., 2013; Sherry et al., 2014; Shulman et al., 2009; Spasojevic & Alloy, 2001; Sturman et al., 2015; Yao et al., 2009; Zuroff et al., 1990). For most of these studies a moderate effect size was observed, with three studies demonstrating a strong effect size (McGrath et al., 2012; Priel & Shahar, 2000; Sherry et al., 2014). For one of these studies the relationship was observed using both self and informant report of self-critical perfectionism (Sherry et al., 2013). Three studies also observed a significant positive relationship between self-criticism at T1 and depression at T3 (Brewin & Firth-Cozens, 1997; McGrath et al., 2012; Sherry et al., 2014), with all but one of these studies demonstrating a moderate to strong effect size. Just one study observed a relationship, with a strong effect size, at T4 (McGrath et al., 2012). No studies failed to observe a significant relationship between T1 self-criticism and subsequent depression.

Controlling for T1 depression, eight studies (of the twelve that tested for this) found that self-criticism at T1 predicted a significant increase in symptoms of depression between T1 and T2 (Brewin & Firth-Cozens, 1997; Liu et al., 2012; McGrath et al., 2012; Priel & Shahar, 2000; Sherry et al., 2013; Sherry et al., 2014; Shulman et al., 2009; Sturman et al., 2015; Yao et al., 2009). Half these studies observed a moderate effect size and half of them observed a weak effect size. Although just one study found T1 self-criticism to predict a significant increase in depressive symptoms at T3 (10 years), this result was only evident amongst male participants and the effect size was weak (Brewin & Firth-Cozens, 1997). Three studies did not find self-criticism to significantly predict an increase in depressive symptoms between T1 and T2 (Peleg-Sagy & Shahar, 2015; Shahar, 2006; Zuroff et al., 1990), however, the statistical results were not reported for any of these studies. In the third of these studies, Zuroff and colleagues (1990) found that after controlling for depression at T1, self-criticism significantly predicted introjective state depression as measured by a “worst period” rating

(Zuroff et al., 1990). Shahr (2006) observed a three-way interaction between self-criticism, stress and depression, whereby under high but not low stress, T1 depression augmented the effect of self-critical perfectionism on T2 depression. One study found a significant negative effect between T1 self-criticism and T2 depression, which they explained was likely due to suppression effects (Kopala-Sibley et al., 2015).

Spasojevic and Alloy (2001) explored whether rumination or private self-consciousness (PSC) mediated the relationship between self-criticism and number of prospective major depressive episodes (MDE's). They found that, with rumination as a potential mediator, the relationship between self-criticism and number of prospective MDE's lost significance when rumination was entered into the equation. In contrast, with PSC as a potential mediator the relationship maintained its significance when PSC was entered into the equation, suggesting that only rumination mediates the relationship between self-criticism and number of prospective MDE's. Liu and colleagues (2012) also report evidence consistent with the suggestion that self-criticism may exert a longitudinal effect on depressive symptoms through excesses of interpersonal behaviour, including aggression, openness and dependency.

#### ***3.4.2 Is self-criticism associated with subsequent symptoms of anxiety?***

Two studies observed a significant positive relationship, with weak effect sizes, between self-criticism at T1 and anxiety at T2 (Shulman et al., 2009; Sherry et al., 2014) and T3 (Sherry et al., 2014). However, controlling for T1 anxiety, neither of these studies found self-criticism at T1 to significantly predict an increase in anxiety symptoms at T2. Another study observed a significant positive relationship, with moderate effect sizes, between self-criticism at T1 and social anxiety at T2 and T3 (Gautreau et al., 2015). However, controlling for T1 social anxiety, this study also did not observe self-criticism at T1 to significantly predict social anxiety symptoms at T2. No other studies found self-criticism at T1 to significantly predict an increase in anxiety between T1 and T2.

#### ***3.4.3 Is self-criticism associated with other subsequent symptoms of psychopathology?***

One study, which investigated the effect of self-criticism on terrorism-related perceived stress and depression, observed a significant positive relationship, with a weak effect size,

between self-criticism at T1 and perceived stress-related exposure at T2 (Lassri et al., 2013). This study also found self-criticism at T1 to significantly predict, with a weak effect size, an increase in levels of psychopathology at T2 under high levels of perceived stress-related exposure, but not under low levels of perceived stress-related exposure. No other studies were identified which were exploring the association between self-criticism and subsequent psychopathology.



## **4. Discussion**

### **4.1 Aims and key findings**

The aim of this systematic review was to explore whether there is evidence that self-criticism is associated with higher levels of symptoms of psychopathology amongst common mental health problems over time, in student populations. Since the majority of studies concerned depression as the primary outcome, it is not possible to fully answer the review question with regard to the full range of common mental health disorders. However, findings from the current review suggest that high self-criticism is associated with high subsequent levels of symptoms of depression, with evidence of moderate to strong effect sizes. This finding is reasonably valid given that the methodological quality of the fourteen studies that explored this relationship was mostly good ( $n=7$ ) or adequate ( $n=4$ ) with fewer studies rated fair ( $n=3$ ). It should be noted that this does not necessarily indicate a causal relationship. However, the fact that this finding held up when baseline levels of depression were controlled for in eight studies implies that self-criticism is associated with later depression, over and above the level of initial symptoms. Similarly, in a meta-analysis of longitudinal research, Smith and colleagues (2016) found that seven dimensions of perfectionism, including self-criticism, had small positive relationships with follow-up depression even when baseline depression and neuroticism were controlled for. Indeed, as that meta-analysis suggests, it is possible that a third variable influenced both self-criticism at T1 and depression at T2 in the studies included in the current review. The eight studies in the current review that found T1 self-criticism to be associated with an increase in depressive symptomatology between baseline and follow-up assessments, even when controlling for baseline depression, showed weak to moderate effect sizes. This finding is reasonably valid given that the methodological quality of most of these studies was good ( $n=5$ ) or adequate ( $n=2$ ) with just one study rated as fair. Although three studies did not find self-criticism to be significantly associated with an increase in symptoms of depression, the methodological quality of these studies was either adequate ( $n=2$ ) or fair ( $n=1$ ). This provides evidence consistent with the suggestion that self-criticism may play a contributory role in maintaining or increasing levels of depressive symptomatology. This

would indicate that interventions targeting self-criticism may be protective in reducing this risk.

However, a key finding from this review concerns the measurement of self-criticism, with the vast majority of studies using the Depressive Experiences Questionnaire (DEQ) (Blatt et al., 1976). The original 66-item version of questionnaire was not developed as a measure of self-criticism but rather as a measure of introjective and anaclitic depression. Findings from the nine studies using the full 66-item DEQ need to be interpreted with caution. Five of the reviewed studies (3 of which received the highest quality ratings) used a short-form of the DEQ measuring those items that loaded most strongly onto the self-criticism factor (9-items: Bagby, Parker, Joffe & Buis, 1994; 5-items: Blatt, Quinlan, Chevron, McDonald & Zuroff, 1982). However, even some of the items from the short-form of the DEQ may be measuring symptoms of depression e.g. “many times I feel helpless” (9 items) and “I often feel guilty” (5 items). Similarly, the Personal Style Inventory (Robins et al., 1994), another measure used by one of the reviewed studies, was also not developed as a measure of self-criticism but rather as a measure of sociotropy and autonomy. Although there is some overlap between autonomy and self-criticism, they are nevertheless two different constructs. Two studies also used subscales of multi-dimensional perfectionism measures, alongside the DEQ-SF, to assess self-critical perfectionism. Thus, in this research self-criticism was viewed as a dimension of perfectionism, rather than as a separate construct.

There is a dearth of prospective studies exploring the effect of self-criticism on symptomatology of common mental health disorders other than depression. Findings from two studies in this review, suggest that self-criticism at T1 is associated with anxiety at T2 (and T3), however, to a lesser degree than depression, with evidence of weak effect sizes. Given that the methodological quality of the two studies were adequate or good, this finding may also be considered reasonably valid. Moderate effect sizes were also observed in the one study exploring the relationship between self-criticism and subsequent symptoms of social anxiety, with the methodological quality of this study rated as adequate, which suggests the finding is reasonably valid. Unlike depression, none of the studies exploring the association between T1 self-criticism and subsequent anxiety, found an increase in symptoms between baseline and follow-up. Lastly, only one study explored the

relationship between self-criticism and subsequent terrorism-related perceived stress, with the results suggesting that self-criticism is only associated with an increase in symptomatology in situations of high stress. Although the methodological quality of this study was adequate, the effect size was weak, so this finding should be interpreted cautiously. Therefore, the evidence suggests that the relationship between self-criticism and subsequent anxiety may be less strong than the relationship between self-criticism and subsequent depression. However, this comparison must be viewed with caution as the measure of self-criticism typically used, the DEQ, includes symptoms of depression so that the apparent relationship is likely to be inflated relative to that for anxiety. For all anxiety disorders, there is a clear need for further research to corroborate the evidence. No studies were identified regarding eating disorder psychopathology even though self-criticism has been reported as a common characteristic of individuals with these problems (Kelly & Carter, 2013).

Another notable finding is that most studies involved just two time-points, were 12 months or less in duration and attrition rates were high. Thus, although the findings offer some longitudinal evidence, it would be interesting to see whether the same effects would be observed with multiple time-points, over a longer time-frame and with better retention rates. With regard to retention rates, however, the few studies that did account for this in their analyses, did not find any significant differences on T1 measures between retained and lost participants. The one study that followed participants for ten years, observed that self-criticism was only associated with depression in males after this length of time despite females reporting more symptoms of depression overall. The authors of this study suggest that for females, depression may be related more to social or situational job-related factors than to personality or cognitive styles (Brewin & Firth-Cozens, 1997), especially in light of reported conflicts between career and family (Firth-Cozens, 1991). Although the quality of this study was rated as adequate, this observation may be of relevance to the findings of the current review, given that the majority of participants in the included studies were female undergraduates. Indeed, several studies recruited from within their own Psychology departments, where there is marked prevalence of female students (Cynkar, 2007).

Although T1 psychopathology was accounted for in the analyses of all the studies in this review, most studies did not assess history of mental health problems, which may have influenced levels of self-criticism at T1. This is important since each episode of psychopathology may create ‘scars’ that increase self-criticism (Sturman & Mongrain, 2005). Therefore, despite findings from this review suggesting that there is a prospective relationship between self-criticism and psychopathology, causality is still not clear. Self-criticism may have a stronger association with subsequent episodes of psychopathology rather than first onset of psychopathology. Another related issue is the fact that all but one study used a continuous measure of psychopathology rather than a diagnostic assessment. Such continuous measures may be more sensitive for statistical analysis but cannot be assumed to represent a clinical diagnosis. Indeed, as Coyne (1994) cautions, self-reports of symptoms are qualitatively different to clinical diagnoses. However, the two most common continuous measures (i.e. BDI and CES-D) used by studies in this review have well established psychometric properties. The one study that did use a structured interview to assess depression, observed that the relationship between self-criticism and the number of prospective depressive episodes was mediated by rumination. Although, the quality of this study was judged as only fair, other research also suggests that there is some overlap between self-criticism and rumination. For instance, Treynor, Gonzalez and Nolen-Hoeksema (2003) refer to a particularly unhelpful form of rumination as “brooding”, which involves “passive comparison of one’s current situation with some unachieved standard” (p.256). It is this type of rumination, that has been associated with suicidal ideation among healthy adults (O’Connor & Noyce, 2008). Of note, no other studies in this review measured rumination and therefore could not account for it in their analyses.

## **4.2 Strengths and limitations**

There were a number of strengths and limitations of the current review that need to be considered. With regard to strengths, the search strategy conducted was thorough and allows for replication of results. Moreover, the quality assessment tool used was selected specifically for assessing the quality of longitudinal research and was adapted to suit the

objectives of the current review. The fact that almost one-third of the included studies were evaluated by a second independent researcher helps to minimise researcher bias and adds to the validity of findings from this review. With regard to limitations, grey literature was not included in the review and there may have been a publication bias favouring studies finding a significant relationship between self-criticism and subsequent psychopathology. Furthermore, it should be noted that this review focused only on studies that included a student sample, hence the findings cannot be generalised to other adults or indeed any other age group, such as children or adolescents. Given the suggestion that self-criticism may have a prospective influence on mental health problems, tracking it from childhood/adolescence onwards may be particularly useful for the development of early intervention. Indeed, Kopala-Sibley, Klein, Perlman and Kotov (2016) found that self-criticism (and dependency) significantly predicted the first onset of almost all depressive and anxiety disorders amongst 550 never-depressed adolescent females. The current review also did not include studies when all participants had an existing psychiatric diagnosis which may have answered a different but related question about self-criticism as a maintenance factor in people with a current disorder. Similarly, intervention studies were not included, which would help to address the issue about whether self-criticism plays a contributory role in the development or maintenance of psychological difficulties.

### **4.3 Recommendations**

As the body of research is relatively small any recommendations made are to be considered tentative. Nevertheless, findings from this review have implications for student mental health in that they indicate that self-criticism in students is associated with subsequently higher levels of depressive and anxious symptomatology. This suggests that self-criticism could be a useful construct to target in interventions addressing risk for depression or anxiety in this population. Further research is required, however, to understand the prospective relationship between self-criticism and other forms of common mental health problems. Specifically, research exploring the relationship between self-criticism and the full range of anxiety disorders and eating disorders over time, would be beneficial. To enhance the quality of this research, it is suggested that researchers aim to follow participants for

more than two time-points, over more than one year and that they control for levels of psychopathology at T1 (including past episodes). It is also recommended that further research is carried out using alternative or additional measures of self-criticism, such as the Forms of Self-criticism/Attacking & Self-reassuring Scale (Gilbert, Clarke, Hempel, Miles & Irons 2004) or the Self-Critical Rumination Scale (Smart, Peters & Baer, 2015).

#### **4.4 Conclusions**

In conclusion, this systematic review provides some evidence that there is a significant prospective relationship between self-criticism and symptoms of psychopathology amongst a student sample. The evidence associating self-criticism with depression is reasonably strong, and includes not only evidence of an association between levels of self-criticism and the degree of subsequent depression but also with *increases* in depression.

However, findings are much more limited for anxiety and no research was identified regarding eating disorders. Further good quality research is required to investigate further whether self-criticism contributes to the development, maintenance or worsening of psychopathology. Preventative and treatment interventions for common mental health disorders in students could consider targeting self-criticism.

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## **Main Research Project**

**A qualitative investigation of the experience of self-criticism in a student population**

First supervisor: Dr Kate Rimes

Second supervisor: Dr Patrick Smith

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## Abstract

The aim of this study was to develop an in-depth understanding of the phenomenology of self-criticism in a highly self-critical student sample and participants' beliefs about the causes and consequences of their self-criticism. Twenty-four undergraduate and postgraduate students took part in a semi-structured interview. Participants were included if they reported significant impairment in their daily life due to their self-criticism and wanted help to reduce this. Interviews were transcribed verbatim and thematic analysis was carried out. Six key themes about the experience of self-criticism were identified: 1) It can be about anything and everything, 2) It's been around for a long time, 3) It's an automatic way of thinking for me, 4) It holds me back in life, 5) It comes down to not being good enough and 6) It needs to be taken down a notch. Participants reported a range of negative effects of self-criticism but also positive beliefs about the function of self-criticism. Furthermore, they experienced difficulties stopping the self-criticism and wanted help for this, while at the same time expressed ambivalence about change. Participants often viewed self-criticism as part of their personality although they all also acknowledged environmental influences on the development of their self-criticism. Findings from this study highlight the nature of self-criticism amongst students, the severity of its impact, underlying beliefs and potential barriers to change.

*Key words: self-criticism, self-compassion, qualitative, interview, student, mental health, psychopathology*

## **1. Introduction**

### **1.1 Definitions and nature of self-criticism**

Self-criticism involves judging and scrutinising oneself in a harsh and punitive manner (Shahar et al., 2011). Psychologists from different theoretical orientations have attempted to understand and conceptualise self-criticism. One of the earliest attempts comes from the psychodynamic perspective, which proposes that self-criticism occurs when the superego attacks the ego in an attempt to protect an important other from the individual's feeling of anger towards that other (Freud, 1917). Gestalt psychologists suggest that self-criticism occurs when there is a split between two aspects of the self, with one part of the self, criticising, judging and blocking the experiences of the other more submissive part of the self (Shahar et al., 2011). From an evolutionary standpoint, self-criticism is associated with status and through social comparison an individual may adopt a more or less submissive position, signalling to others the extent to which they are a threat (Sturman & Mongrain, 2005). From a cognitive perspective self-criticism may manifest in self-directed negative automatic thoughts, which arise due to the activation of underlying beliefs about the self (Beck, Rush, Shaw and Emery, 1979). Other theorists, including Goffman (1955) and Jones and Pittman (1982), propose that self-criticism elicits support and reassurance from others in the environment and is therefore a form of strategic self-presentation. Common to these theories is the view that self-criticism is a single process. More recently however, researchers have proposed that self-criticism is, in fact, a multifaceted experience involving different forms, functions and underpinning emotions (Gilbert, Clarke, Hempel, Miles and Irons, 2004). In developing a measure of self-criticism and self-reassuring, these researchers identified two different functions of self-criticism, namely self-correction/self-improvement and self-persecution. Gilbert and colleagues (2004) suggest that the form of self-criticism (e.g. focusing on inadequacy in the self or hatred of the self) will depend on the function of self-criticism for the individual. Moreover, when an individual's self-criticism takes on a self-persecutory function, this is likely to have a more detrimental and pathogenic effect than when the function is to self-improve. Given the novel nature of these findings these researchers suggest the need for further research to explore self-criticism, including its intent, developmental origins and role in psychopathology.



## **1.2 Self-criticism as a component of other psychological processes**

Traditionally self-criticism has been researched primarily as a component within other psychological constructs. For example, Blatt's theory of depression vulnerability suggests that self-criticism is a component of one of two personality styles that predisposes people to depression (Blatt, 2004; Blatt & Zuroff, 1992). According to this theory, a tendency for self-critical thinking is part of a personality trait characterised by sensitivity to disapproval or criticism from others, competitiveness and negative judgment towards the self and others (Blatt, D'Afflitti & Quinlan, 1976) and an achievement orientation (Blatt & Zuroff, 1992). A self-critical personality style is also hypothesised to be associated with parental rejection and restrictiveness (Blatt, 2004). With regard to evidence, Blatt and Zuroff (1992) found self-criticism to be highly associated with depression. However, findings from Luyten and colleagues (2006) demonstrate that self-criticism may be associated with a wider range of psychopathologies. Indeed, self-criticism has been found to be either significantly associated or to occur more frequently in people with major depression (Cox, Fleet & Stein, 2004), bipolar disorder (Francis-Raniere, Alloy & Abramson, 2006), suicidality (Clara, Cox & Enns, 2004; Faaza & Page, 2003), social anxiety (Cox, et al., 2004), post-traumatic stress disorder (Cox, McPherson, Enns & McWilliams, 2004), borderline personality disorder (Southwick, Yehuda & Giller, 1995), self-injurious behaviour (Glassman, Weierich, Hooley, Deliberto & Nock, 2007) and eating disorders (Fennig et al., 2008).

A very similar construct to self-criticism is maladaptive or unhealthy perfectionism, whereby an individual strives to meet high standards in order to avoid criticism (Dunkley, Zuroff & Blankstein, 2006). This type of perfectionism involves frequent and harsh self-scrutiny, overly critical self-evaluations, an inability to be satisfied with success and chronic concerns about others' criticism and expectations (Dunkley, Zuroff & Blankstein, 2003). It is associated with avoidant coping (Dunkley et al., 2003), poor goal progress (Powers, Koestner, Zuroff, Milyavskaya & Gorin, 2011) and symptoms of depression (Dunkley & Blankstein, 2000). Recent research suggests that self-criticism may mediate the relationship between unhealthy perfectionism and distress, although no firm conclusions about causal pathways can be drawn due to the cross-sectional nature of this study (James, Verplanken & Rimes, 2015).

Self-criticism may also be related to low self-esteem, which refers to a process of self-evaluation culminating in a global negative view of oneself (Kernis, 2003). For instance, self-criticism has been observed to be significantly negatively associated with self-esteem (Dunkley & Grilo, 2007). Self-criticism is also proposed to be one of several maintaining factors in a cognitive behavioural therapy model of low self-esteem, with a self-critical thinking style characteristic of individuals with low self-esteem (Fennell, 1998). However, self-criticism and low self-esteem are also conceptually different to one another, with low self-esteem involving a general negative view of oneself, whereas self-criticism is more concerned with a failure to live up to one's own or others expectations (Dunkley & Grilo, 2007).

Self-criticism has also been found to significantly correlate with rumination (Spasojevic & Alloy, 2001), which refers to recurrent dwelling on negative self-experiences including feelings, problems, upsetting events and negative aspects of the self (Watkins, et al., 2011). Evidence suggests, however, that self-criticism (and negative temperament) may predict recovery from depression more than rumination, which is more strongly associated with severity of episode (Kasch, Klein and Lara, 2001). Despite the links between rumination and self-criticism they are, however, theoretically distinct. For example, although rumination may include self-criticism at times, people may also ruminate about the behaviour of others or about what might happen in the future.

### **1.3 Treatment response, self-compassion & early experiences**

Highly self-critical individuals tend to have poorer treatment outcomes in cognitive therapy (Rector, Bagby, Segal, Joffe & Levitt, 2000) and interpersonal therapy (Marshall, Zuroff, McBride & Bagby, 2008) for depression. It is suggested that there is a "heart-head lag" between cognitions and emotions, whereby these individuals intellectually understand the logic behind the therapy but do not experience any change in their emotional state (Lee, 2005, p.328). Clinical observation and theory suggest that self-critical patients struggle to show kindness and warmth towards themselves, to feel self-compassionate and to soothe themselves in times of distress (Gilbert, 2009). It has been suggested that they may not have access to the same memories of being soothed as individuals who are low on self-criticism (Gilbert & Irons, 2005). A significant association has been observed between level of self-

criticism in students and recall of parents as rejecting and low in warmth (Irons, Gilbert, Baldwin, Baccus and Palmer, 2006). Similarly, Sandquist, Grenyer and Caputi (2009) found that a lack of parental warmth was associated with self-critical cognitions in a non-clinical student sample, although noted that retrospective measures of parenting may have been biased by participants' current mood. These findings suggest that a tendency to become self-critical can originate outside of the self through early relationships and then becomes internalised (Blatt & Homann, 1992). Koestner, Zuroff and Powers (1991) reported that self-criticism in 12-year old children was associated with perceived parental demands for obedience, as well as low levels of warmth and responsiveness reported by their mothers when the child was age 5. Moreover, self-criticism in childhood has been found to prospectively predict later adjustment (Zuroff, Koestner & Powers, 1994).

In response to these observations, Gilbert and colleagues developed a multi-modal treatment approach called compassionate mind training (CMT), which regards self-compassion as a skill that can be learnt and self-criticism as a habit that can be overcome (Barnard & Curry, 2011). CMT is designed specifically for people high on self-criticism and shame and aims to increase self-compassion and self-soothing abilities (Gilbert & Irons, 2005; Gilbert & Proctor, 2006). Research investigating the effects of CMT has found it to be an effective approach in reducing symptoms of depression, anxiety, self-criticism, shame, inferiority and submissive behaviours (Gilbert & Proctor, 2006; Gilbert, Baldwin, Irons, Baccus & Palmer, 2006). Additionally, it has been found to be an effective treatment for trauma (Beaumont, Galpin & Jenkins, 2012) and psychosis (Mayhew & Gilbert, 2008). Other compassion-focused interventions have also been found to improve outcomes, for example, patients recovering from the negative symptoms of schizophrenia (Johnson, et al., 2009), day hospice patients (Imrie & Troop, 2012) and guilty and restrictive eaters (Adams & Leary, 2007).

#### **1.4 The phenomenology of self-criticism**

Given that self-criticism has been postulated to be a component of several different psychological constructs, a risk factor for psychopathology and a factor involved in poor treatment response, a more in-depth understanding of this phenomenon would be useful (Gilbert et al., 2004). Two qualitative studies have included self-criticism as a focus for their

investigations. The first of these involved an exploration of self-compassion and self-criticism among ten individuals recovering from psychosis (Waite, Knight & Lee, 2015). People reported that self-criticism maintained distressing experiences, while compassionate self-acceptance promoted empowered action, recovery and growth. The second study involved an analysis of participant feedback forms and letters written to self-critical voices among women with eating disorders who took part in an emotion-focused therapy group treatment (Brennan, Emmerling & Whelton, 2014). This study highlighted the salience of self-criticism for this clinical group and pointed to both the destructive impact and the protective function of the self-critic. More specifically, through therapy participants developed an increasing awareness of the negative impact of their self-critic; however, many participants had little insight regarding the emotional impact. Indeed, participants acknowledged that their self-critic (or their “eating disorder voice”) (p. 72) helped them to cope with difficult emotions and life circumstances, such as by giving them a voice at times when circumstances seemed unbearable. A third study of relevance investigated the experiences of four Turkish individuals who self-identify as having difficulties with self-compassion (Bayir & Lomas, 2016). Four superordinate themes were identified from their interpretive phenomenological analysis. The first theme identified was ‘the double edged sword – perfectionism’, which positioned participants’ sense of inadequacy and their fear of failure alongside their perceived benefits of perfectionism. The second theme identified was named the flaws of compassion and highlighted participants’ beliefs that self-compassionate people can be “devil-may-care” or reckless types of people as well as being “naughty and selfish”. The third theme identified was the effects of a third person and included participants’ perceptions of being a failure in their parent’s eyes and of not having their accomplishments appreciated by their work colleagues. Lastly, the fourth theme was identified as the advantages of self-criticism, such that self-criticism was considered to function as a shield and protect participants from future mistakes, as well as being a key to their success in that it counteracts their perceived laziness. Although the focus of this study was not explicitly on self-criticism, it has provided insight into the phenomenology of self-criticism. In general, however, there is a dearth of research on this topic, hence further research is required to deepen our understanding of self-criticism.

### **1.5 Student mental health**

Student mental health is increasingly becoming a concern across the globe, with increasing numbers of students seeking psychological services (Kitzrow, 2003) and taking psychotropic medication (Gallagher, 2011). Given that there are comparable rates of psychiatric problems among college students and non-college students (Blanco et al., 2008) and most mental disorders emerge between the ages of 15 and 24 years (Kessler, Berglund, Demler et al., 2005), student samples are an important source of information. Indeed, Hunt and Eisenberg (2010) suggest that universities may be a “promising venue” for mental health research (p. 8). In the UK, for instance, it has been found that 31% of female and 23% of male students reported experiencing depressed mood in the previous year (El Ansari et al., 2011).

University students also experience common stressors with 40% of students reported exam stress, assignments and presentations to be a ‘strong’ or ‘very strong’ burden (El Ansari et al., 2011), putting them at further risk. High levels of perfectionist tendencies have also been observed in academic settings (Arpin-Cribbie et al., 2008) with maladaptive perfectionism associated with higher levels of anxiety and depression in students (Kawamura et al., 2001). Similarly, another study found unhealthy perfectionism in first year undergraduate students to predict subsequent increased fatigue and depression following a period of academic stress (Dittner, Rimes & Thorpe, 2011). As discussed above, self-criticism is a key component of unhealthy perfectionism and further understanding of self-criticism in students may help to inform interventions to help prevent or reduce distress, fatigue and other problems. Failing to address mental illness may have serious long-term implications in the realms of academic attainment (Kessler et al., 1995), productivity (Wang et al., 2007) and social relationships (Kessler, Walters & Forthofer, 1998). Thus, it is especially important to develop a phenomenological understanding of self-criticism in a student population. Given that the limited qualitative research identified involves clinical samples or working adults, the addition of a phenomenological study of self-criticism in students would offer novel insights. This could be used to help inform programs to directly target self-critical thinking as a trans-diagnostic process that may be putting students at risk for a range of psychological problems and impairments in their academic work and daily life.

## **1.6 Aims**

The current study aimed to address the gap in the literature and develop an in-depth understanding of the experience of self-criticism in a student sample. As no previous research has studied the phenomenology of self-criticism in a student sample, this study aimed to use a qualitative methodology to generate this understanding.

## **2. Method**

### **2.1 Ethical approval**

Ethical approval was gained from the King's College London (KCL) Psychiatry, Nursing and Midwifery Research Ethics Subcommittee (See Appendix A).

### **2.2 Research Design**

The study involved individual face-to-face interviews with students reporting high levels of self-criticism, the contents of which were analysed using thematic analysis. A qualitative design was selected given the lack of previous research exploring self-criticism in a student population. This type of design aims “to understand and represent the experiences and actions of people” (Elliot, Fischer & Rennie, 1999, p. 216). Moreover, it aims to capture the nuances of individual experience, including the meanings that different individuals ascribe to their experiences (Barbour, 2000). The current study formed the qualitative component of a larger project, in which students received six sessions of compassion-focused therapy for their self-criticism as a pilot study. Information gained from the qualitative interviews was used to guide individual therapy for that second part of the project (See Appendix B for a flowchart illustrating the design of the overall project and the role of each researcher).

### **2.3 Recruitment**

Two recruitment drives for the overall project (including both this qualitative study and the pilot intervention study) were carried out, the first in February-March 2015 and the second in September 2015 (See Appendix C for a flowchart describing recruitment and retention of participants for the two studies). For each drive, the project was advertised twice through an email circular about KCL research projects; information was also included on the KCL intra-net (See Appendix D for advertisement). Individuals (n=176) who made initial contact were sent an Information Sheet (See Appendix E) and a link to the screening measures (See below for further details). Individuals (n=68) who appeared to meet the inclusion criteria (See Table 1) were invited to take part in a telephone screening to further assess their eligibility. Part of the telephone screening involved assessing past and current mental health difficulties by administering the MINI International Neuropsychiatric Interview (English

Version 6.0.0) (Medical Outcomes System, 2016). Eligibility decisions were made after the results of the screening were reviewed within the research team (the current researcher, another trainee clinical psychologist and their supervisor, a clinical psychologist). Once notified of their eligibility participants completed a consent form (See Appendix F). Participation was offered on a first-come-first served basis, with eligible individuals invited to participate immediately if there was capacity available or to go on the waiting list. Those who were not eligible were signposted to alternative sources of support.



Table 4: Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Undergraduate or postgraduate student at KCL.	Current suicidal or self-harming thoughts or behaviours to a level requiring formal mental health services.
Aged at least 18 years old.	Meets DSM-IV diagnostic criteria for a psychotic disorder, substance dependence or anorexia nervosa.
Self-criticism is causing significant impairment in educational, social or other important areas of functioning as indicated by a score of at least 10 on the Work and Social Adjustment Scale (Mundt, Marks, Shear & Greist, 2002).	Currently receiving psychological therapy.
Sufficient proficiency in English language.	Currently taking psychotropic medication unless on stable medication for the past month.
	Currently experiencing a degree of life stress or ongoing psychological issues that are judged to adversely affect their ability to benefit from the subsequent intervention.
	A disorder that is likely to impair capacity to give informed consent.

## **2.4 Participants**

Twenty-four students participated in this study (See Table 2). By the final interviews, data saturation had been reached, i.e. no new major themes were emerging. Given that qualitative research is more interested in revealing the diversity within a population, rather than seeking representativeness (Bannister, Burman, Parker, Taylor & Tindall, 1994; Barbour, 2000), this number of participants was deemed sufficient. The majority of participants were female, Caucasian and postgraduate students. One-third of participants met the criteria for a psychiatric diagnosis at screening, including depression, social phobia, generalised anxiety disorder, agoraphobia and obsessive compulsive disorder.

Table 5: Participant characteristics

<b>N</b>	24
<b>Age, in years</b>	
Mean (SD)	25.8 (6.6)
Range	18-40
<b>Sex, n (%)</b>	
Female	20 (83)
Male	4 (17)
<b>Ethnicity, n (%)</b>	
White British	9 (38)
White Other	8 (33)
Asian/Asian British	5 (21)
Mixed/Multiple ethnic groups	2 (8)
<b>Current anti-depressant medication, n (%)</b>	1 (4)
<b>Current psychiatric diagnoses at screening, n (%)</b>	
None	16 (67)
Depression	2 (8)
Social phobia	1 (4)
Generalised anxiety disorder (GAD)	1 (4)
Social phobia & GAD	1 (4)
Depression, social phobia & GAD	1 (4)
Depression, agoraphobia, social phobia & GAD	1 (4)
Depression, agoraphobia, obsessive compulsive disorder & GAD	1 (4)
<b>Past diagnosis of depression, n (%)</b>	14 (58)
<b>Stage at university, n (%)</b>	
Undergraduate	7 (29)
Postgraduate	17 (71)

## **2.5 Measures**

Participants completed all measures using an online survey (See Appendix G).

### ***2.5.1 The Work and Social Adjustment Scale (WASA) Mundt, et al., 2002)***

The WASA is a 5-item scale and was used to measure the impact of self-criticism on different areas of an individual's life. Participants rated their agreement using a 9-point Likert scale ranging from "Not at all" to "Very severely". A score was given out of 40; higher scores indicated more impaired levels of functioning. Scores of 10 and above are considered to indicate significant functional impairment (Mundt et al., 2002). The internal consistency in previous research ranged from 0.70 to 0.94 (Mundt et al., 2002). In this study Cronbach's  $\alpha = 0.80$ . Participants completed this measure at screening and were considered eligible for study participation if they scored a minimum of 10 on this measure; the mean score at screening was 21.21 (SD: 6.70). Participants' mean score at the time of the interview was 18.29 (SD: 8.49).

### ***2.5.2 The Habitual Index of Negative Thinking (HINT) Verplanken, Friborg, Wang, Trafimow & Woolf, 2007)***

The HINT is a 12-item scale measuring habitual negative self-thinking. Participants rated their agreement using a 5-point Likert scale ranging from "Strongly disagree" to "Strongly agree". A score was given out of 60; higher scores indicated higher levels of negative self-thinking. The internal consistency in previous research was 0.95 (Verplanken et al., 2007). In this study Cronbach's  $\alpha = 0.88$ . Participants' mean score was 36.91 (SD: 5.09) at screening and 35.38 (SD: 7.14) at the time of the interview.

### ***2.5.3 The Self-Critical Rumination Scale (SCRS) (Smart, 2013; Smart, Peters & Baer, 2016)***

The SCRS is a 10-item scale measuring self-critical rumination. Participants rated their agreement using a 5-point Likert scale ranging from "Strongly disagree" to "Strongly agree". A score was given out of 50; higher scores indicated higher levels of self-critical rumination. The internal consistency in previous research was 0.92 (Smart et al., 2015). In this study Cronbach's  $\alpha = 0.75$ . Participants' mean score was 42.13 (SD: 4.42) at screening and 41.29 (SD: 4.73) at the time of the interview.

## **2.6 Procedure**

Participants took part in a semi-structured interview, which is a common method of inquiry in qualitative research aimed at eliciting a detailed account of participants' perceptions and beliefs about a particular topic (Smith, 1995). Each interview was conducted by the researcher or another trainee clinical psychologist. The content covered the participants' experiences of self-criticism and their understanding of how it developed. (See Appendix H for Interview Schedule). Interviews ranged in length from 44-90 minutes and were audio-recorded. The interview took place immediately prior to the first session of the intervention being provided as the second part of the larger project. The subsequent session was delivered by the same researcher, with a brief break in between if the participant wished.

## **2.7 Qualitative Guidelines**

Elliott, Rennie and Fischer's (1999) guidelines for qualitative research were adhered to as closely as possible throughout this research. The guidelines are as follows: 1) owning one's perspective (the two interviewers assumptions and expectations were considered at the time of data collection and during the analytic process); 2) situating the sample (basic descriptive data were collected and reported), 3) grounding in examples (data extracts were used to illustrate the analytic process and the understanding developed), 4) providing credibility checks (the researcher's primary supervisor acted as an analytical 'auditor', findings were corroborated by quantitative data collected at screening and prior to the interview), 5) coherence (a 'thematic map' was developed and presented visually alongside a narrative account), 6) accomplishing general versus specific research tasks (the limits of the current findings in terms of generalisability were acknowledged), and 7) resonating with readers (the researcher attempted to report findings in a balanced and 'real-life' manner that that allows the reader to judge whether they represent an accurate account of the subject matter).

## **2.8 Data Analysis**

Data was analysed according to the principles of thematic analysis, which is defined as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p. 79). Thematic analysis was chosen as the method of analysis for a number of reasons. First, it is independent from a specific theoretical or epistemological

background, which enables it to be used for studies that are not informed by any one particular theory or stance. The flexibility of thematic analysis in this regard, is in comparison to approaches such as Interpretative Phenomenological Analysis (IPA) or grounded theory, which guide the entire research process, delineating the theoretical framework, the specific research questions, the sampling frame and the methods of data collection. Second, thematic analysis was deemed suitable given the proposed sample size for the current study, which was partly based on the number of participants for the pilot intervention study. Unlike IPA, which aims to understand individual experiences and patterns across participants and typically utilises a smaller number of participants, thematic analysis looks for patterns and meanings across the entire data-set. Third, thematic analysis enables an inductive approach of analysis to be undertaken while simultaneously acknowledging the important role of the researcher as an active and reflexive part of the analytic process. With this mind-set, themes are not considered to passively 'emerge' from the data, which may be the case in methods such as grounded theory, but rather are actively identified. Lastly, thematic analysis was selected for this study as it allows interview data to be organised into a coherent set of findings, without negating the inherent principles of qualitative research by using more typically quantitative techniques such as coding frames or inter-rater reliability, such as in content analysis.

Data from the current study were analysed in line with the six steps outlined by Braun and Clarke (2006). Audio-recordings of the interviews were transcribed verbatim using a reputable transcription service. The researcher became familiar with the data by reading the transcripts and making notes of initial impressions. Next, line-by-line coding was completed for five of the twenty-four interviews. These initial codes were collated into potential themes and subthemes creating a working 'thematic map' (See Appendix I for extract demonstrating thematic coding). At this point a credibility check was carried out by the researcher's primary supervisor who reviewed the 'thematic map' and associated codes. Following discussion, the 'thematic map' was revised. Line-by-line coding continued for the remaining nineteen interviews and new codes were added to the 'thematic map'. Through constant reference to the data the themes and subthemes were refined several times. Throughout this process a number of additional credibility checks were carried out by the researcher's primary supervisor, ensuring the rigour and validity of the analysis. Once the

researcher was satisfied that each theme was mutually exclusive and exhaustive, final names and definitions of the themes were generated (See Appendix J). These were again reviewed by the researcher's primary supervisor to ensure they made conceptual sense. The second researcher involved in the overall project also reviewed the final themes and subthemes as an additional credibility check. NVivo software was used to collate and organise the data.

### **3. Results**

#### **3.1 Owning my perspective**

Prior to each interview the researchers recorded any expectations they had about the upcoming interview, as well as noting any reflections post interview. Although these notes were not formally analysed some observations will be highlighted. Of note, the researchers reported feeling some anxiety when screening indicated high levels of self-criticism and associated impairment. This may have been due to the fact that content from the interview was to be used to inform the intervention, which took place immediately following the interview. As the intervention was being delivered by trainee clinical psychologists, with no prior experience of the model, it was somewhat anxiety-provoking to hear about high levels of clinical need. Additionally, as the interview protocol was lengthy, researchers sometimes felt some concern about covering all topics in the time allocated. The researchers also acknowledged feeling intimidated by some participants, due to their personal characteristics and interpersonal style. For instance, when participants were from a similar academic background, the researchers reported feeling under pressure to conduct the interview well and to appear competent. Additionally, when participants appeared rather angry/brusque in manner, or spoke about wanting to be “superior over others” as one participant did, the researchers reported feeling intimidated. However, as further detail was elicited during the interview, it was felt that these participants may have been protecting themselves from underlying feelings of vulnerability. The researchers noticed high levels of self-criticism in the interviewees during the interview process and in their interactions with participants. For example, one participant commented that she was “an idiot” for waiting outside the room rather than knocking on the door of the interview room. The researchers also noted that some participants said very little in response to interview questions, which may have reflected a fear of negative evaluation. Conversely, others spoke at length about certain topics, which may have been a strategy aimed at avoiding more difficult interview topics.

Although the interviews were conducted by two researchers, only one was involved in the analysis of the interviews. This may have meant that this researcher had a bias towards reporting the experiences of those participants whom she delivered the intervention to.



Moreover, prior to the final stage of analysis, this researcher went on maternity leave, which may have reduced her familiarity with the data when it came to the interpretation and writing of the report on her return. In addition, at the time of interpretation this researcher was attending her final clinical placement in an eating disorders unit, where self-criticism featured prominently amongst service users, which may have biased her towards self-criticism about eating behaviours and appearance. However, this researcher had previous doctoral level experience in qualitative research, which helped increase her awareness of the possibility of researcher factors and she made a conscious effort to minimise any such bias.

### **3.2 Findings**

Six key themes were identified from a thematic analysis, details of which will be outlined below. (Note: each quote is labelled with participant details namely, gender (M/F), level of education (PG/UG) and ID number).

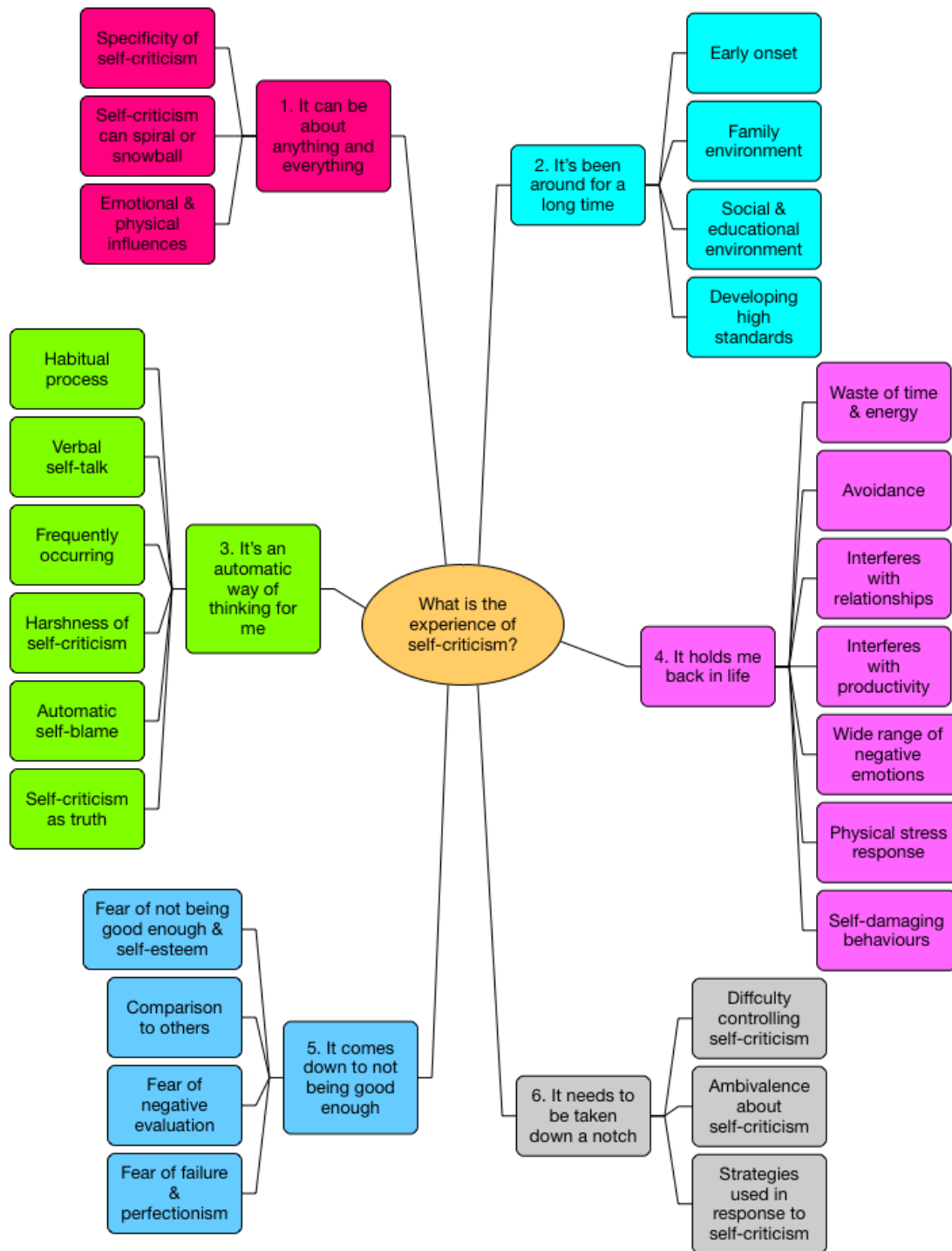


Figure 2: A visual representation of themes and sub-themes

### **3.2.1 Theme 1: It can be about anything and everything**

#### **3.2.1.1 Specificity of self-criticism**

Overall, participants described a variety of ways in which they experienced self-criticism. For the majority of participants this involved being self-critical about virtually all aspects of their lives; “pretty much everything” (FPG5, FPG18) or “anything that comes to mind” (MPG21). For a smaller number of participants, self-criticism was limited to specific areas of their lives. In the realm of academia and career, participants spoke about being self-critical about their abilities to perform in both classroom and assessment situations. Participants also reported being self-critical about their social life and relationships. A common thread was “saying or doing the wrong thing” with several participants indicating that this was the crux of their self-criticism. Some participants reported being self-critical about their appearance and body image. As one participant said: “I always hated the way I look” (FPG8). Participants indicated that they could be self-critical about almost any aspect of their behaviour. For example, behaviours such as being messy, being late, drinking alcohol, smoking, shopping, watching television, were all mentioned as sources of self-criticism. Some participants even described being self-critical about their self-criticism. A number of participants described being self-critical about the choices and decisions they had made in their lives. Some participants also highlighted the changeable nature of self-criticism and reported deterioration or improvements in the different types of self-criticism across time.

#### **3.2.1.2 Self-criticism can spiral or snowball**

Several participants indicated that their self-criticism could “spiral” (FPG18, FPG20, FPG43, FUG62, MPG64) or “snowball” (FPG12, FPG75, FUG99) out of control. This could occur in multiple ways. In the first instance, self-criticism about one aspect of their life had the potential to escalate into self-criticism about multiple aspects of their lives. In the second instance, self-criticism about a specific aspect of themselves could escalate into self-criticism about themselves more generally as a person. One participant explained what happens for her:

*One thing leads to another and you think about one thing and then it makes a tenuous link to something else and you think about that aspect and then that*

*balloons out into something... you start thinking about one aspect and the next snowballs and what started off as a single comment in your head has now transpired to an entire conversation a couple of hours long. (FPG18)*

Central to this, was the process of rumination or over-analysis, which the majority of participants indicated that they engaged in. Participants used phrases such as, “replaying in my head” (MUG17), “dwelling” (FPG43), “questioning” (FPG80) and “think[ing] it through and through and through” (FPG43) to describe their experience. In doing so, participants highlighted how this could lead to an increase in self-criticism by reminding them about all the different aspects of themselves they weren’t happy with.

### *3.2.1.3 Emotional and physical influences*

The majority of participants acknowledged that their emotional state influenced the extent of their self-criticism. Feelings of sadness, disappointment, anxiety, loneliness, anger, frustration, stress or feeling out of control, were all mentioned as potentially triggering self-criticism. As one participant said, “it definitely depends on my mood” (FPG12). Participants also indicated that their physical state played a role in their self-criticism. Tiredness and lack of sleep were reported as being particularly influential, however, hunger, pain or illness, being hungover and weight gain, were also mentioned.

## **3.2.2 Theme 2: It’s been around for a long time**

### *3.2.2.1 Early onset*

The majority of participants indicated that self-criticism had been a part of their lives for a very long time, typically originating in childhood. Participants used phrases such as, “it has always been there” (FPG43, FUG99), “it’s been happening for my entire life” (FPG55) and “since I was a little kid” (FPG94) to describe the onset. When asked to describe their earliest memory of being self-critical, typically participants recalled childhood situations where they subsequently felt guilty or ashamed of their behaviour. For example, one participant remembered stealing some coloured paper from school with a friend:

*...It was under my bed...I couldn't sleep, I couldn't stop thinking about this paper, I couldn't stop thinking what a bad person I was because I'd taken this paper. So I took it downstairs and gave it to my mum, told her what had happened and she was like well, 'You can take it back to school'. That floored me for day, I was devastated. I just felt, I really did not like myself for doing such a terrible thing... (FPG12)*

Some participants reported that their self-criticism originated in adolescence, referring to the many changes that typically occur at this stage of life. Puberty, a change in body shape, an increase in self-awareness, the transition to secondary school, new peer groups, romantic interests and exams, were all mentioned as playing a role. A smaller number of participants indicated that their self-criticism began in early adulthood, citing their experiences at university and life transitions as the triggers.

#### *3.2.2.2 Family environment*

Although participants suggested that their self-criticism was likely due to multiple factors, with many indicating their perplexity as to why they were self-critical at all, virtually all participants acknowledged the potential influence of their family environment. A number of participants referred to a "tense" (FPG80) or "heavy" (MPG21) atmosphere at home, while several others described having difficult relationships with their parents, with arguments cited as common. Some participants referred to parental mental health difficulties, including depression and alcoholism as contributing to a difficult family environment. Several participants spoke about perceiving a lack of warmth or support from their parents; one participant commented that her parents "weren't really there when I needed them" (FUG62). Moreover, a number of participants described their feelings being dismissed or met with little sympathy. For instance, one participant whose father died when she was young reported being "never able to get emotional help" from her mum or stepfather (FUG99).

Many participants spoke about being on the receiving end of direct and indirect criticism from their family members, something which was reported as continuing into adulthood for some. One participant spoke about how her mother "always reminded me of all the mistakes I've made" (FPG54). Another participant reported that her father would criticise

“literally anything...even sometimes things that you couldn’t help” (FPG75). Some participants described the anger they would be subjected to; one participant said, “all hell would break lose” if she or her sister had forgotten to do something, such as, wash the dishes (FPG61). Some participants recalled their mothers, in particular, making comments about their weight or trying to influence their food choices. One participant remembered her mother “taking chocolate bars out of my hand” (FPG61), while another participant recalled her mother saying ‘don’t eat this, don’t eat this’ after she had put on some weight during puberty (FPG55). Some participants also spoke about observing their family members being negative or self-critical themselves. One participant reported:

*Like my mum; I have a vivid memory of her standing there, looking at herself in the mirror and just being really unhappy and just going, ‘Oh look at this’, grabbing her stomach and saying ‘Oh look at this, it’s horrible’ and stuff like that (FPG61)*

Indeed, participants were inclined to think of self-criticism as something they had learned and developed over time. Although some participants acknowledged the potential role of genetics, this was considered to be a less important factor, with environment and experiences, and even epigenetic influences, taking precedent.

Despite the above-mentioned difficulties, the majority of participants also described positive or neutral family experiences. As one participant said, “on the whole, it was a normal happy childhood” (FPG20). Oftentimes, while one parent was a source of contention or criticism, the second parent or another family member, was described as being more supportive and loving. For instance, one participant spoke about her father being “a lot more supportive” than her mother (FPG61).

### *3.2.2.3 Social and educational environment*

The majority of participants attributed their experiences in social and educational contexts as contributing to the development of their self-criticism. Many participants described feeling like they didn’t fit in with their peers, or felt different in some way, at one stage of their life or another. They used terms such as, “felt alienated” (MPG21), “felt like a complete outsider” (MUG33) and “not feeling like I fit in” (FPG55). Some participants

mentioned that this feeling of not fitting in was exacerbated by cliques and stereotypes, which made it more difficult for them to integrate with their peers. Others spoke about the influence of being an only child or of moving home and school several times as contributing to this feeling of not fitting in. The impact of growing up in a culture that was different to one's culture of origin was also referred to. As one participant said:

*I grew up in X and that was a problem because I always felt white amongst non-whites ...I experienced racism upside down and I always felt I was this white girl amongst non-whites and I felt different and I think that affected me a lot, I didn't quite fit in (FPG54)*

A number of participants reported being more explicitly bullied at school or in their neighbourhood, due to perceived differences in their personality or appearance. For example, doing well in lessons, being overweight, being perceived as too girly (for a boy), having a different accent, wearing glasses or having a less common hair colour, were all cited as targets for bullying. Other participants reported that their experience of bullying took the form of social exclusion. As one participant recalled:

*When I was a bit younger, I wouldn't say I was bullied, but I was excluded a lot from social groups at school and I think that [was the onset of] my personality self-criticism and my appearance self-criticism because I was always second guessing, 'Have I said the right thing' and 'Was it me?' or 'Was it something else?'. (FUG99)*

To counter this feeling of difference, some participants reported trying to portray themselves in a certain way in order to fit in. One participant spoke about how she used to "pretend to be a certain type of person so other people would like [her]" (FUG3). Some participants referred to growing up in communities, where differences, specifically accomplishments, were a reason for judgement. One participant referred to "tall poppy syndrome" where the culture was to "cut down" those who were doing well (FPG43). Significant life events, changes and traumatic experiences were reported as continuing to have an influence into adulthood. For instance, participants described the effect of

bereavement, a change in role and abusive relationships on the development of their self-criticism.

Again despite the reported difficulties, many participants also spoke about having positive or neutral social or educational experiences. Most participants spoke about having at least one friend and having some kind and supportive people in their lives. With regard to school, several participants highlighted that their experiences differed from primary to secondary school, with primary school typically described as a happier place.

#### *3.2.2.4 Developing high standards*

Many participants reported feeling under pressure to develop and maintain high standards, particularly in relation to their academic performance. Participants spoke about this perceived pressure as stemming from multiple sources, including teachers, families, friends and oneself. In general, a number of participants spoke about it being “normal” (FPG54) or “a given” (FUG62) that you did well but that it was a “problem” (FPG54) if you didn’t do well. One participant highlighted the high expectations in her school:

*[It was] very pressurized, it was a school that thrived off its exam results, so everyone’s exam results had to be really good. If you got a High A, you have to retake and get an A\*, that kind of environment. If they didn’t think someone was going to get A’s and A\*s they used to make them retake exams as an external candidate [laughter] (FUG99)*

Several participants described a critical and unsupportive school environment. For instance, one participant, who has since been diagnosed with dyslexia, recalled her teacher calling her a “dunce” when she was struggling with her lessons (FPG8). Indeed, experiences of being “ridiculed” (FUG3), “named and shamed” (MPG21) and “singled out” (FPG5) were reported as common. In an effort to minimise these kinds of experiences, some participants recalled avoiding misbehaving and “stayed below the radar” (MPG21) or “towed the line” (FPG55). However, as suggested by some participants, the environment and ethos of schools could differ greatly.



A number of participants reported experiencing considerable pressure to achieve from home, with both implicit and explicit expectations made clear. Participants spoke about being “pushed quite a lot” (FUG99), constantly being told “you need to apply yourself” (FUG3) or feeling an “unspoken expectation” to do well (FPG94). A few participants described their exam results being met with dissatisfaction. As one participant recounted:

*Some of my earliest memories are coming home from school with like 98% in Maths exam and my Mum going, “Well, where’s the other 2%?” and she wasn’t being horrible or mean at all, but they are my earliest memories and therefore thinking, ‘What did go wrong? Why didn’t I manage to get that?’ (FPG18)*

On the other hand, some participants indicated that the pressure and high expectations they experienced originated within themselves. One participant spoke about “always been very driven” (FPG44), while others acknowledged that their natural abilities made them feel the need to maintain a high standard. A number of participants reported making comparisons with their peers or siblings to gauge their performance. Several participants recalled feeling upset if they got something wrong, didn’t get the highest results or somehow didn’t live up to their own expectations. For example, one participant reported being “gutted” and “really disappointed” when she got a B grade in two of her GCSE’s (FPG80). A few participants spoke about not wanting to disappoint their parents, with one participant, whose mother raised her as a single parent, saying she “want[ed] to do well for her” (FPG70). Some participants also referred to their desire for high standards permeating into other aspects of their lives, with extra-curricular activities such as music lessons, sports, dance and drama mentioned. Participants spoke about spending a substantial amount of time practicing and training and wanting to do their chosen activity to their best of their abilities.

### **3.2.3 Theme 3: It’s an automatic way of thinking for me**

#### **3.2.3.1 Habitual process**

A number of participants spoke about their self-criticism as a “natural” or “automatic” way of thinking, that doesn’t involve them having to “consciously think about it”. One participant

(MPG21) said it was like a “reflex” to be self-critical, while another said it was “interwoven” into her life (FPG55). For example, in the words of this participant:

*But I think it's just such a natural part of the way I've come to like deal with things, it's more like that then making a conscious like, "I'm going to sit down now and think about all the things I don't like about myself or what I just did or..." (FPG70)*

Moreover, when asked about their understanding of self-criticism most participants reported thinking of it as “part of my personality” (e.g. FPG12, FUG41, FPG43, FPG61, MPG64, FPG70, FPG94, FUG99, FUG124).

### 3.2.3.2 Verbal self-talk

The majority of participants referred to their self-criticism as being verbal in nature, taking the form of thoughts or sentences. Participants described this in various ways, saying the self-criticism was like a “voice in my head” (FPG61), “an internal kind of monologue” (FPG20) or “talking to myself in my head” (FUG92). For example, one participant said:

*I have that voice in my head saying 'no you can't phrase it like that, no-one's going to understand what you're saying, you sound stupid asking it'. So I have all of this going on in my head and I can't actually get those voices out. (FPG5)*

A minority of participants referred to their self-criticism as taking the form of an image, for example, as a “playback of what happened” (MUG33) or as a “fantasy” or “daydream” about what might happen (FUG99). Fewer still referred to their self-criticism as being a sense, while a couple of participants thought that their self-criticism took on multiple forms depending on the circumstances. As one participant said:

*If I just think about something and I'm on my own, then it's mostly sentences, because then I can have like internal conversations with myself, but if it's, erm, if it's like social interaction when there is not much time for thoughts, it's like what, what is happening, that's more as a feeling, I guess. (FPG94)*

### 3.2.3.3 Frequently occurring

The majority of participants reported that the frequency of their self-criticism was very high, with several describing it as being there “most of the time” or “all of the time”. Several participants spoke about it as being “constantly there” or “relentless”, with one participant saying “it’s a constant thing you can’t turn off” (FUG92). Others referred to it as “background noise” (MPG21) or “always there in the back [of my mind]” (FUG62). In the words of one participant:

*I mean it’s like nearly sub-conscious like it kind of just flashes through your brain and is gone again, but I would say like 50, maybe like 80-100 times a day. It is quite relentless. A lot of the time it just kind of comes in and goes again. It’s not like I dwell on it, it’s just a kind of background, always there thing but actual times when I think you shouldn’t have done that, that was wrong, that was crap, is really all the time, often, often. (FPG75)*

Other participants indicated that the frequency of their self-criticism was more variable and may be associated with specific times or be dependent on certain factors such as their mood. Participants revealed a variable awareness of their self-criticism, with some saying they were completely aware of it while others were not always aware of it while it was happening. Similarly, some participants reported finding it difficult to determine the frequency of their self-criticism.

### 3.2.3.4 Harshness of self-criticism

Common to most participants was the harshness and judgemental nature of their self-criticism. Participants gave examples of the words they use to describe themselves when they are being self-critical such as “ugly”, “disgusting”, “idiot”, “loser”, “pathetic” and “selfish”. One participant described her self-criticism as being a “way of beating myself up” (FPG20), while others said it was “like a punishment” (FPG70) or like “bullying yourself” (FPG18). Another participant said:

*It just looks like having a really nasty friend. Like it’s kind of the way that your worst enemy would speak to you and treat you. Like someone who really violently dislikes*

*you and who is trying to pick on all the things where you are the most weak or the most vulnerable. (FPG75)*

#### *3.2.3.5 Automatic self-blame*

Many participants reported instinctively blaming themselves for negative occurrences in their lives and the lives of those closest to them. Participants used phrases such as, “it’s always my fault” (FPG54), “it’s all about being my fault” (FPG75) and “[I] usually blame myself for it” (FPG94). Participants reported this as being the case even for events beyond their control. One participant spoke about how she blames herself for bad things that happen to her believing that she “deserve[s] it” or is “tainted” in some way (FUG3). This same participant said, “I carry a lot of guilt” in relation to “bad things that have happened to close friends”. Another participant spoke about feeling “personally responsible” for her mother’s depression (FPG20). Similarly, another participant spoke about blaming herself when an abusive relationship ended. She said:

*I should have seen it coming, again, coming back to that thing of it being my fault rather than his fault...You’ve created this situation for yourself because you’ve been stupid or because you’ve been trusting or because you’ve been caring to somebody who didn’t care for you, or because you’ve been too soft or because you’ve been weak. (FPG12)*

#### *3.2.3.6 Self-criticism as truth*

Some participants highlighted their view that their self-criticism was an “objective”, “rational” or “true” representation of themselves. As one participant said:

*In a weird way, it’s not really being down on myself, it’s just reminding – I’m sort of reminding myself of my flaws and that I have limits and that I’m, you know – don’t, don’t expect the world because you’re never gonna get it. (FPG55)*

In line with this some participants spoke about their difficulty in accepting reassurance or positive feedback from others.

### **3.2.4 Theme 4: It holds me back in life**

#### **3.2.4.1 Waste of time and energy**

Overall participants described self-criticism has having a marked negative impact on their lives, perceiving it to be a “waste of life, a waste of time” (FPG80) and a “waste of energy” (FPG12). Several participants referred to self-criticism as holding them back in life. As one participant said, “it holds me back, I feel...constrained by it” (FPG54). Another participant referred to self-criticism “disabling” her (FPG43), while another participant said it was stopping her “from reaching [her] full potential” (FPG54). The following participant explained:

*There’s an opportunity lost to being like that because you’re wasting so much of your time and your life doing it that there are other things that you could do which could be make you happy if only you could stop doing it. (FPG18)*

A few participants spoke about how self-criticism prevented them from “being authentic” (FPG54) or from being their real selves. One participant said, “I can’t really be myself” (FUG99), while another acknowledged that she is “more conscious of trying to act the part” (FPG5). Related to this, a few participants mentioned finding it difficult to trust themselves with regard to the choices they make.

#### **3.2.4.2 Avoidance**

A vast majority of participants spoke about avoidance in relation to the specific triggers for their self-criticism. As one participant said, “I would avoid whatever it is that was making me self-critical” (FUG3). Avoidance in relation to social situations was reported as particularly common. Participants used terms such as “excluding myself...and cutting myself off” (FPG8), “opting out of things” (MPG21), “anti-social” (FUG41) and “prefer[ring] to be on my own” (FPG54) to describe their social behaviour. Similarly, many participants whose self-criticism was centred around their appearance spoke about avoiding looking at themselves in the mirror in an attempt to minimise their self-criticism. One participant with this type of self-criticism spoke about how she prefers to “live [her] life in a bubble” (FPG55). Avoidance was also reported in the context of participants academic or career lives. For instance, a number

of participants spoke about not “speaking up” (FUG92) in lectures and tutorials, not wanting to seek help from supervisors or not putting themselves forward for opportunities. Participants spoke about avoidance as serving a protective function, with one participant commenting that “it’s just safer to sit at home” (FPG18). However, some participants indicated that this strategy of avoidance was not necessarily a very effective one and might serve to increase their self-criticism in the form of a “vicious cycle” (FPG20).

#### *3.2.4.3 Interferes with relationships*

Many participants spoke about the negative impact self-criticism has on their relationships with others. Several participants described how it interferes with their ability to engage in social situations. They explained how self-criticism “distracts me from listening” (FPG70) and “stops you from interacting normally” (FPG94). These difficulties were attributed to being “more in [their] own head” (FPG61). Other participants described how self-criticism inadvertently affects those closest to them and their relationship with them. For instance, one participant spoke about how she can “drag other people down around me” (FPG18), while another commented that “you turn into someone that people don’t want to be around...’cause you’re just obsessing about yourself” (MPG21). In addition, some participants reported projecting their high expectations and criticism onto those around them. As one participant said “when things go bad for me, I’m definitely more critical of my husband and kids” (FPG43).

#### *3.2.4.4 Interferes with productivity*

Participants spoke about procrastination and reduced productivity as a result of self-criticism. Participants referred to the “cycle of trying to do work, procrastinating, not doing it then at the end regretting it” (MUG33). One participant acknowledged that procrastination and self-criticism have resulted in her having “to do my entire thesis in two weeks” (FPG18). She explained:

*I try so hard to pace things and do them at the right time but I just sit and procrastinate and by procrastinate it usually means having a massive go at myself while not doing the thing that I know I need to do and then leave it to the last minute*

*and have to put an all-nighter to get it done and then I'm absolutely exhausted and that kind of perpetuates the thing. (FPG18)*

#### *3.2.4.5 Wide range of negative emotions*

The vast majority of participants highlighted the negative impact of self-criticism on their emotional wellbeing, with some suggesting that self-criticism and emotions “go hand in hand”. They referred to a wide range of emotions including: sadness, depression and hopelessness; anxiety, stress and worry; shame, embarrassment and guilt; anger, frustration and irritability; loneliness and isolation; numbness and delayed emotional reaction; and a lack of control and disempowerment. For example, one participant described how self-criticism makes her feel:

*Sad. Quite miserable. Sometimes quite annoyed and frustrated. Kind of a bit isolated as well. It's difficult for other people to necessarily understand why you are get so upset about things. Just low. (FPG20)*

#### *3.2.4.6 Physical stress response*

With regard to the effects of self-criticism on their physical wellbeing some participants identified muscle tension, an increase in body temperature, faster breathing, tightness in chest, lack of energy, poor sleep and tiredness, restlessness, teeth grinding and difficulty relaxing; however, many were not aware of any effect of self-criticism on their physical selves. One participant explained:

*Sometimes I get quite warm, like I would feel that my cheeks are getting quite warm suddenly, yes it would be like you'd get like a little flip in your stomach when you, like or the realisation that perhaps you did something wrong... (FUG3)*

#### *3.2.4.7 Self-damaging behaviours*

A number of participants highlighted various ways in which they neglected their own needs or made self-sacrifices that were not necessarily in their best interests. One participant commented, “I don't nurture myself” (FPG5), while another described having a “growing

sense of apathy towards [herself]", which makes her "just make the minimum effort" in looking after herself (FUG92). Similarly, another participant said:

*Towards myself, I can get quite neglectful, on a small scale, sometimes, like I'll just eat a microwave meal instead of taking the time to cook a proper dinner and things like that, I think, 'Oh, does it matter, I can't be bothered'... and not necessarily taking care of my appearance in the right way, I just feel, 'Oh, I couldn't be bothered to put on nice clothes, or put on any make up today, it doesn't matter, like no-one's going to notice, just go out'. (FPG20)*

A number of participants spoke about seeking comfort in food with a couple of participants reporting binge eating following periods of restriction. A few participants also spoke about the negative effects of their behaviour on their physical body. For instance, one participant spoke about having "mouth ulcers all the time", saying that it's "from excess everything... excess waking hours, excess exercise, excess alcohol, excess work (FPG43). Another participant admitted that self-criticism makes her still go to the gym even "if I've injured myself". (FPG61) A couple of participants described engaging in behaviours that were damaging to themselves despite knowing that it would be better for them to do something else. A minority of participants mentioned drinking excessive alcohol. One participant described turning to alcohol and drugs when her self-criticism was at its worst. She said:

*I wouldn't look after myself, I wouldn't be... I did not give a shit, I wouldn't care, eat a rubbish, crap diet, drugs, alcohol but the problem with alcohol then it'll give you a hangover, then you can't work as well so that would be less.... [I] stopped eating, just drank, mainly alcohol. (FPG80)*

### **3.2.5 Theme 5: It comes down to not being good enough**

#### **3.2.5.1 Fear of not being good enough and self-esteem**

Participants referred to a number of underlying beliefs and associated constructs that they perceived to drive their self-criticism. The belief of not being good enough was particularly



pervasive and was a common thread across virtually all forms of self-criticism. In the words of one participant:

*You're not good enough, that is what it comes down to and you can apply that across the board to social situations and to my weight and to my feelings about my degree, it all comes back down to not being good enough. (FPG75)*

Given that this was a student population many participants spoke about not being good enough to do the course they were registered for. One participant spoke about feeling like a “fraud” and her fear of “being found out” as not intellectual enough to be doing her course (FPG5). Participants used words such as “unworthy” (FUG3), “worthless” (MUG17) or “not anything special” (FPG55) to describe their self-perception. Similarly, for some this feeling of not being good enough meant they viewed themselves as a burden on others. One participant spoke about thinking that her family and friends were “obligated” to spend time with her (FPG61), while another reported feeling “burdensome on other people” (FPG8). Related to this, some participants spoke about finding it difficult to like or accept themselves, however, for most this was a tendency rather than an absolute. One participant’s lack of self-acceptance was so extreme, however, she fantasised about being a different person:

*I sort of dream that I'm someone better than I am and then I get a realisation, I'm not that person I dream I am and it gets worse. So it's like I look in the mirror and I realise I'm not the kind of person I was imagining and I'm not imagining someone completely different but just someone better...erm, still me but with some modifications that I feel should happen – both personality and looks wise (FPG55)*

Most participants acknowledged that self-criticism and self-esteem were “interlinked” (FPG61) or had a “tight connection” (FPG54), with several commenting that it’s the low self-esteem that makes them self-critical. However, for others the impact on self-esteem was dependent on specific incidents of self-criticism. Related to this, some participants found it quite difficult to identify any strengths when asked about this; however, most were able to identify at least a couple of strengths.

### 3.2.5.2 Comparison to others

The vast majority of participants reported that comparison to others, played a key role in their self-criticism and contributed to their underlying negative view of themselves. The focus of comparison could be anyone including, friends, partners, course-mates, acquaintances and strangers. In particular, participants spoke about putting other people “up on a pedestal” (MUG17) perceiving other people in a much more positive light than themselves. For example, one participant’s view of the other people on her course was that, “everyone’s just so much better than me” (FUG62). Participants also reported looking to other people’s lives as a yardstick for measuring and assessing their own lives. One participant illustrated how seeing other people’s results triggered her self-criticism:

*I could see obviously that people had got this like substantially [laughs]... higher mark than me, and that sort of sets it all off, because I’m like, ‘What did I do that they didn’t? What didn’t I do that they did?’ or you know like ‘How can I be more like that?’ (FPG70)*

Social media was also mentioned as contributing to this cycle of comparison to others and self-criticism. For instance, one participant spoke about following a “load of thin, unrealistic looking women” on Instagram and how looking at them exacerbates her self-criticism (FPG44). Participants also reported comparing their levels of self-criticism to others, perceiving other people to have minimal, if any, self-criticism.

### 3.2.5.3 Fear of negative evaluation

Another common belief amongst this sample was a fear of negative evaluation, with most participants expressing their concern that other people would judge them negatively. Indeed, for some participants this was at the crux of their self-criticism, with one participant explaining the extent of her concern:

*That’s a lot about how I criticise my own self mostly thinking how people see me, because if I do something that no-one has seen it’s, it’s sometimes okay, erm, I would criticise it, but I would be more like, it doesn’t really matter, I think it’s based more on that others would criticise me, so I criticise myself to avoid, avoid this (FPG94)*

Moreover, for some participants their self-criticism involved imagining what another person might think of them, especially in the context of social situations. One participant described using what she imagines other peoples' view of her "as a stick to beat myself with" (FPG75). For a couple of participants, the fear of negative evaluation extended to the ways in which they managed their home and cared for their children as reflections of themselves. One participant explained:

*I would feel like I wasn't a good parent and wife if the house wasn't in a good way, so I don't want people to come in and see that...so I'm constantly going around and it's a reflection of me if the house is bad so I can't have it in a bad way, again, the kids' schoolbags and things like that, I feel it's a reflection of me. (FPG43)*

Related to this fear of what other people think was the preference to keep feelings and vulnerabilities to oneself. Participants used terms such as "keep[ing] it all under wraps" (FPG55), "trying not to show flaws" (FPG54), "don't show my emotions" (FUG62) and "keeping a guard up" (FPG20) to illustrate this. One participant spoke about how "exposing your vulnerabilities" makes you "look weak and all f\*\*\*\*d up" (FPG75), while another claimed that she didn't want to appear "like a vampire...suck[ing] all the energy" out of other people (FPG54). Some participants were particularly keen to clarify their feelings about sharing their vulnerabilities in the context of taking part in a research study. As one participant iterated:

*I do I keep a lot to myself, that's why I can't believe I've told you so much, um that I guess if people know the real me they'll judge me and possibly not like me or reject me (FPG8)*

#### *3.2.5.4 Fear of failure and perfectionism*

Another underlying belief that was referred to frequently was the fear of failure. One participant spoke about herself having a "crippling fear of failure" (FUG99), while another participant described being "petrified" that she was going to make "another mistake" (FPG18). This fear was reported as especially pertinent in the context of academia and career paths. Bad grades, exam failure, not being accepted on courses, not being called for

interview or not being offered a job, were all mentioned as triggering self-criticism. However, failure in other contexts was also referred to with one participant commenting that, “any failure on nearly any scale” (MUG33) could make him self-critical. Several participants indicated that making mistakes was unacceptable and described feeling under pressure to get things right. Related to this, several participants highlighted the role of perfectionism in influencing and maintaining their self-criticism. For instance, many participants described the pressure they felt to do things to a very high standard. They made comments such as “[I] expect myself to be the best I can possibly be” (FPG12), “[I] could do even better” (MUG17) and “striving to do better” (FPG70). Participants frequently spoke about all the things they felt they “should” be doing and how failure to act on these expectations could lead to self-criticism. One participant spoke about how she “can’t win” because there’s always something different she “should be doing” (FPG61). Related to this, some participants revealed a tendency to minimise their achievements or to be dissatisfied with their achievements. One participant spoke not giving himself “too much credit” for getting into university as everyone from his school “gets into uni” (MUG33). Another participant described her feelings in response to getting a first class honours degree:

*So when I’d find out about the 72 [exam grade] and I got the new job, that day I felt really depressed. When I achieve the goals that I should be, instead of self-critical what’s the opposite of that? Should be praising myself, there’s just numbness, there’s just nothing. (FPG80)*

### **3.2.6 Theme 6: It needs to be taken down a notch**

#### **3.2.6.1 Difficulty controlling self-criticism**

Many participants spoke about finding it difficult to control their self-criticism once it starts. Participant said things such as, “there’s no stop button to it” (FPG8), “I can’t seem to break out of it” (FPG12), “it doesn’t really go away” (MPG21) and “the thoughts just keep coming” (FUG92). One participant explained what happens for her:

*I don’t have a lot of control because even when I try to distract myself it’s kind of there and it doesn’t work... I guess I feel momentarily distracted because I’m trying to*

*think of something else, but I think the voice comes back and then it takes over, so trying to focus on something else or thinking differently doesn't really change things.*  
(FPG5)

Others reported not even trying to stop their self-criticism. Some participants said that they “let it fester” (MPG21) or “let it happen” (FPG44) or “[let it] continue” (FUG124). For others, their ability to control their self-criticism was dependent on their mood or the severity of the self-criticism.

### *3.2.6.2 Ambivalence about self-criticism*

In general, participants revealed mixed and ambivalent views about the role of self-criticism in their lives. However, when asked about what their lives would look like with a decrease in their self-criticism the majority anticipated a positive effect. One participant illustrated, “I guess I just picture life where it was just grey and then it suddenly became more colourful” (MUG17). Several participants referred to life being “easier” and that it would be like a “weight had been lifted”. Participants envisioned a better social life and an improvement in their relationships, along with being more proactive and productive which would enable them to “let go” and enjoy life more. They also imagined various improvements in their emotional wellbeing, including an increase in happiness, a reduction in anxiety, worry, stress, shame and embarrassment and an increase in confidence and acceptance of themselves. In the words of one participant:

*I think it would look calmer, I think it would look easier to deal with, I think it would be more peaceful, just more focused, I think just being able to spend time enjoying things and not constantly worrying and being negative about them and about myself would be quite nice.* (FPG5)

In spite of these perceived benefits, many participants also disclosed their perception of self-criticism as serving a positive function for them. The vast majority referred to self-criticism as motivating, using phrases such as “constructive” (MUG33) and “helps you improve” (MPG64). Indeed, a common concern reported by participants was a fear of losing motivation if they were to become less self-critical. Others spoke about self-criticism being

comforting or protective, with a few participants saying that sometimes “it feels good” to be self-critical. One participant referred to it as a “safety net” or a “cover” (FPG54), while another said, “it’s like a friend I’ve had my entire life” (FPG55). Other advantages to self-criticism were also described including: knowing one’s limitations, maintaining personal standards and preventing one from becoming arrogant. Indeed, some participants reported wishing they could hold onto some self-criticism, though the general consensus seemed to be about finding a balance. As one participant reported:

*I don’t wanna completely get rid of it because I feel... self-criticism if you do it like moderately it’s healthy ‘cause, it’s kind of like keeping yourself humble and keeping yourself in check of what you need to do to make yourself better (FUG62)*

Related to this view of self-criticism as positive, some participants described characteristics associated with self-criticism as their personal strengths. For example, characteristics such as “tenacious”, “organised” (FPG75), “hardworking”, “diligent” (FPG80) and “determined” (FUG92) were repeatedly referred to. A couple of participants also acknowledged some negative beliefs about what the alternative to self-criticism would mean to them. One participant spoke about feeling “self-indulgent” (FPG12) if she was talking about her feelings, while another said it would be like giving himself “pity” if he tried to be kind to himself (MPG64).

### *3.2.6.3 Strategies used in response to self-criticism*

Participants illustrated a number of ways in which they had attempted to manage their self-criticism. The most common response to self-criticism described by participants was to distract themselves. Other participants spoke about doing things that they found enjoyable such as, watching television, listening to music, gardening, shopping or helping others. For some this process involved forcing themselves to do things even when they didn’t feel like doing it.

*Or I’ll deliberately do something that I know makes me feel good, like even if I don’t feel like putting on nice clothes or doing my hair or something, I’ll make myself do it, because sometimes just that makes you feel a bit different in yourself. (FPG20)*

Exercising was also highlighted as a popular strategy, be it going for a walk, going to the gym or more intensive training. However, some participants acknowledged that exercise had the potential to be harmful and exhausting if they pushed themselves too much. Indeed, a small number of participants spoke about pushing themselves and keeping very busy in an effort to minimise their self-criticism. For instance, one participant spoke about how she is “on the go all the time” and is always “looking for ways to make [herself] busy” so she has “less time to think” (FPG75). Another participant reported physically exerting herself to the point of exhaustion so she wouldn’t “have the energy” to do something that she would later be self-critical about (FPG43).

Several participants reported trying to generate an alternative perspective in response to their self-criticism. For example, this included trying to see things more rationally, imagining what they would say to a friend, finding other explanations for what happened, looking at the bigger picture, reassuring themselves and focusing on the positives. A number of participants also reported practicing mindfulness and responding to self-criticism with acceptance. One participant described why she finds mindfulness helpful:

*I started doing mindfulness sort of stuff as well, like a few times a week and I find that really helpful, because sometimes you can just clear out and like, because with distracting things you feel like you're pushing it away a bit, and eventually when you're not doing something it will just come back. (FPG20)*

Many participants also spoke about reaching out to others during times of self-criticism, with friends, partners, siblings and parents being the primary sources of support. Related to this the majority of participants reported currently having people in their lives who were kind and supportive of them. Other strategies that participants mentioned using in response to self-criticism included, using humour, ignoring or saying stop to self-criticism and releasing their emotions by having a cry. When asked about their hopes and expectations for participating in the intervention all participants spoke about wanting to reduce their self-criticism and wanting to learn strategies to better deal with their self-criticism.

## 4. Discussion

### 4.1 Aims and summary of results

The aim of this study was to develop an in-depth understanding of self-criticism in a student sample. This study used a qualitative methodology to develop this understanding and identified six key themes from a thematic analysis of the data. Quantitative data were also collected and were considered alongside qualitative findings. Each theme will be briefly discussed below:

#### ***4.1.1 Theme 1: It can be about anything and everything***

The first theme captured the many ways in which this sample reported being self-critical. Of note, participants in this study reported experiencing self-criticism about a wide range of topics, including academia/work, social/relationships and appearance/body image. To our knowledge, this is the first time that the breadth of self-critical experiences has been identified in this manner. Although, this may reflect the fact that some participants were prompted by the questions in the semi-structured interview to consider their different experiences of self-criticism, many also spontaneously described being self-critical about other aspects of themselves, their behaviour and their lives. Additionally, participants reported being self-critical about their self-criticism, indicating a potentially unhelpful meta-cognitive belief which may contribute to the maintenance of distress. The role of unhelpful beliefs about one's thinking processes has been highlighted across various psychological disorders (e.g. Wells, 2006). Some participants reported that self-criticism was so pervasive that all aspects of their lives were affected. It is possible, however, that this generalised view may have been influenced by a global negative thinking style, as might be expected given the association between self-criticism and depression (Blatt, 2004). Indeed, 20% of the sample met the criteria for current depression and 58% of the sample met the criteria for past depression, potentially contributing to a more negative way of thinking. Similarly, this theme also highlighted how a specific incident of self-criticism could escalate into more negative thinking, which again may reflect cognitive distortions, such as over-generalisation or catastrophizing, which are common to depression and anxiety (Beck, 1964). Participants also acknowledged the role of rumination in this process, consistent with previous research finding evidence of associations between these constructs (e.g. Spasojevic & Alloy, 2001).



Additionally, participants' mean score on the Self-Critical Rumination scale indicated high levels of self-critical rumination.

#### ***4.1.2 Theme 2: It's been around for a long time***

The second theme illustrated a range of perceived influences in the development of self-criticism. Of note, the majority of participants reported that their self-criticism originated in their early lives, with many struggling to recall a time when they were not self-critical. Many participants thought that self-criticism was at least partly a personality style for them, which is consistent with previous research (e.g. Blatt & Zuroff, 1992). At the same time, participants indicated that both family environment and their experiences in social and/or educational settings were likely to have played a contributory role. This is consistent with recent research with a non-clinical young adult sample suggesting that both recalled parental and peer relationships were independently associated with current levels of self-criticism (Kopala-Sibley, Zuroff, Leybman & Hope, 2013). The current findings are also consistent with studies using correlational quantitative methodology indicating associations between parental self-criticism and specific parenting styles such as 'achievement-oriented psychological control' with the young person's level of self-criticism (Bleys, et al., 2016; Soenens, Vansteenkiste & Luyten, 2010). Indeed, participants in the current study described the explicit and implicit expectations placed on them in relation to their academic performance. However, across both family and social domains, participants also noted that they had many positive experiences. These positive influences on their lives may have helped to reduce the potential negative impact of self-criticism on their academic work, as all must have attained good grades to gain a place at their highly-ranked university.

#### ***4.1.3 Theme 3: It's an automatic way of thinking for me***

The third theme described the nature and form of self-critical thinking amongst students offering a unique insight into their experience of self-criticism. In particular, participants described their self-criticism as habitual, primarily verbal and frequently occurring. This qualitative evidence was corroborated by participants' mean scores on the Habit Index of Negative Thinking, which indicated a moderate level of habitual negative thinking. The perceived habitual process of self-criticism is important as it has potentially positive

implications for change, offering a useful and motivating rationale for interventions targeting self-criticism such as the one subsequently offered to these student participants. The finding that self-criticism for this sample was reported as largely verbal also has positive implications, as it means that self-critical thoughts can be directly challenged and alternatives offered. Indeed, compassionate thinking is a key skill for addressing self-critical thoughts in Gilbert's Compassionate Mind Training (CMT) (Gilbert, 2009). Less commonly participants referred to self-criticism as a sense or as an image, which provides insight into the diverse nature of self-criticism. Compassionate imagery is another key skill addressed in CMT (Gilbert, 2009).

The frequency with which participants reported their self-criticism is concerning and would potentially present a significant challenge for intervention. However, as reported by participants, awareness can be variable. Some participants may have been underestimating the frequency of their self-criticism whereas the high frequency in many participants may reflect a lack of experience in tuning into specific thoughts or distinguishing between self-critical and more general negative thoughts. Similarly, reduced awareness was reported by participants in Brennan and colleagues (2014) study, which was addressed through therapy.

Participants also spoke about their self-criticism as being harsh, involving self-blame and being truthful. The reported harshness of participants' self-criticism is in keeping with Gilbert and colleagues (2004) 'hated self' form of self-criticism. Participants descriptions provide a unique insight into the, at times, brutal reality of living with self-criticism. Thus, learning to respond to oneself with kindness and warmth would be of clear benefit to those who experience this type of self-criticism. The reported tendency for participants to blame themselves for various scenarios, is again, common to a depressive type of thinking and supports Blatt's (2004) depressive vulnerability theory. A number of participants also endorsed the view that their self-criticism was true or objective, which supports findings from previous research where depressed individuals were more likely to submit to a self-attack than non-depressed individuals (Greenberg, et al., 1990). At the same time, it should be noted that these students did not typically report such extreme self-hatred that is often observed in those receiving help from mental health services, in line with previous observations that self-hatred aspect of self-criticism are less common in non-clinical

samples (Gilbert, 2010b, p.94).

#### ***4.1.4 Theme 4: It holds me back in life***

The fourth theme provides a rich description of the general negative impact self-criticism had on the lives of participants. More specifically, participants spoke about self-criticism holding them back in life and preventing them from being their real selves. For instance, in an attempt to protect themselves, participants described avoiding many different situations that would likely trigger their self-criticism. This made participants feel as though they were missing out on experiences. Such avoidance has been conceptualised as a safety strategy, designed to defend the individual from external attacks or uncomfortable or overwhelming emotions (Gilbert & Proctor, 2006). However, it may also reflect the high expectations that participants had for themselves, meaning that they may never be fully satisfied with their behaviour. Indeed, participants also spoke about self-criticism as limiting their productivity and generally wasting their time and energy, which they could use for other more useful purposes. Participants also spoke about engaging in self-damaging behaviours, such as neglecting their physical needs, failing to take adequate rest and at times resorting to alcohol or drugs. This finding relates to previous research, which has identified that self-criticism is associated with self-defeating behaviours, including binge eating, procrastination and interpersonal conflict, over and above evaluative concerns perfectionism (Sherry, Stoeber, & Ramasubbu, 2016). Evidence of such self-destructive behaviour from the current study contributes to our knowledge of the serious impact of self-criticism on students. Moreover, it may have detrimental and lasting repercussions for young adults at a time when they are already facing multiple stressors (El Ansari et al., 2011). Indeed, participants also acknowledged that their self-criticism contributed to a range of negative emotions and some noticed a physical stress response. Quantitative evidence from the Work and Social Adjustment Scale support findings from this theme, with mean scores indicating a significant level of functional impairment.

#### ***4.1.5 Theme 5: It comes down to not being good enough***

The fifth theme outlined the underlying beliefs associated with self-criticism, including not being good enough, fear of negative evaluation and fear of failure. Most notably, the belief of not being good enough was repeatedly referred to by participants in this study. This is

consistent with Gilbert and colleagues (2004) description of the ‘inadequate self’ component of self-criticism. The notion of being “good enough” is a central feature of conceptualisations of self-esteem (Rosenberg, 1965) but there has been relatively little previous research directly investigating the relationship between self-criticism and self-esteem. Although most participants suggested that their self-criticism and their self-esteem were interlinked, they differed in how they thought the two constructs were connected. Specifically, some participants thought that they were self-critical because they had low self-esteem whereas others thought that specific instances of self-criticism had a negative influence on their self-esteem. A bidirectional relationship between self-critical thinking and low self-esteem would be consistent with Fennell’s (1998) model of self-esteem. There was also evidence of maladaptive perfectionism in many participants in this study, consistent with previous research indicating significant correlations between questionnaire measures of these constructs in students (Dunkley et al., 2006)

Participants described making negative social comparisons, which they ascribed to as both contributing to and maintaining their self-criticism. This parallels previous research about the impact of social media on self-esteem. For instance, a significant correlation has been observed between Facebook use and lower trait self-esteem, with the relationship mediated by greater exposure to upward social comparison (Vogel, Rose, Roberts, Eckles, 2014). Additionally, negative social comparison along with the experience of being unable to escape one’s thoughts and feelings, has been found to mediate the pathway from self-criticism to depression (Sturman & Mongrain, 2005).

#### ***4.1.6 Theme 6: It needs to be taken down a notch***

The sixth theme portrayed participants’ wish to reduce their self-criticism, despite experiencing feelings of ambivalence. This ambivalence has important implications for understanding self-criticism as a separate construct as well as for its role as a trans-diagnostic construct. Although participants were unanimous in their wish to reduce their self-critical thinking, hence their participation in the larger intervention project, they nonetheless expressed positive beliefs about self-criticism along with concerns about reducing it. For instance, participants endorsed the view that self-criticism is motivating.

This may be in line with previous evidence suggesting that self-critical perfectionists are achievement oriented (Blatt & Zuroff, 1992). It may also reflect that it was a student sample, predominantly at postgraduate level attending a high ranking university, where the expectation to perform may be greater than in the general population. Participants also perceived self-criticism to be protective, a finding which has been observed in previous qualitative research (Brennan et al., 2014; Bayir & Lomas, 2016;). Moreover, this view is in keeping with Gilbert's (2010) compassionate mind approach, which proposes self-criticism to be a coping mechanism in response to internal and external key fears. With regard to participants' concerns about reducing self-criticism, part of the reported difficulty was not knowing how to stop it or feeling as though an alternative such as self-compassion was self-indulgent. Of note, previous research suggests that an inability to defend oneself from self-attacks is a risk factor for depression (Greenberg, Elliot & Foerster, 1990). This reported difficulty in responding to self-criticism is a crucial finding from this study and highlights the need for appropriate interventions to be developed and offered to students.

#### **4.2 Methodological strengths**

There were various methodological strengths which serve to enhance the findings from this study. Adhering to guidelines for qualitative research (e.g. Elliot et al., 1999), helped enable a methodologically rigorous and rich account of the experience of self-criticism to be developed. This involved detailing the particulars of the participants who took part, grounding the findings in carefully selected quotes, carrying out credibility checks to limit researcher bias and being reflective at all stages of data collection and analysis. With regard to data collection, the use of a semi-structured interview was valuable; not only does it enable a detailed account of participants' beliefs and perceptions to be elicited, it is also appropriate for research about sensitive topics, for example where participants may be reluctant to reveal certain types of information without specific prompting (Smith, 1995). The size of the sample meant that saturation was able to occur, whereby no new codes were being identified by the final interviews. Another study, using an interpretative phenomenological analysis to investigate a similar topic, included just four participants (Bayir & Lomas, 2016), which potentially limits the breadth of findings. Braun and Clarke's (2004) guidelines for thematic analysis offered flexibility, transparency and an emphasis on

context to fully appreciate and make sense of the data. The use of NVivo software to organise the data helped to provide a clear audit trail for this study.

### **4.3 Methodological limitations**

There were certain methodological limitations, which may impede the relevance and usefulness of findings from this study. The fact that participants completed a number of measures of self-criticism and its associated constructs before the interview, as well as participating in a screening call, may have influenced their responses. Indeed, several participants commented that they hadn't thought about certain aspects of their self-criticism until they were completing the measures. Another potential limitation concerns the detailed nature of the interview schedule, which may not only have impacted participants' responses but may also have influenced the interpretation of the results. With regard to participants' responses, however, it should be noted that the majority of participants spoke freely and at length about their experience of self-criticism, hence the prompts were only used for those few participants who needed a bit more guidance. In order to overcome any potential bias in interpretation, the researcher maintained awareness of this possibility throughout the analytic process and followed steps to ensure an inductive method of analysis. This involved line by line coding and the process of constant comparison to confirm that the extracted themes were truly representative of the data. The credibility checks carried out by the researcher's supervisor and by the second researcher involved in the project who was very familiar with the experiences of the participants to whom she delivered the intervention to, also helped to minimise any bias. Another issue relates to the potential influence of interviews being conducted by the same researcher who delivered the subsequent intervention. It's unclear whether this helped or hindered participants in giving their accounts. The researcher's interpretation of the results may have been influenced by her training in the use of Gilbert's (2010) Compassionate Mind intervention. It is also possible that the researcher's subsequent therapy work with the participants may have biased her interpretation of the qualitative interview, although this may have led to improved understanding of the points raised by participants. In addition, audio-recordings of interviews were not transcribed by the researcher; however, the researcher read each interview multiple times and was also familiar with the stories of half of the participants having delivered the intervention to them. With regard to the sample,

the comparatively small size and the female bias means that findings cannot be generalized to a larger population; however, this was never the intention given that qualitative research seeks to reveal diversity rather than representativeness (Bannister et al., 1994).

#### **4.4 Clinical implications**

There are several clinical implications arising from this study. The large number of potential participants responding to the advertisement suggests that self-criticism is a salient issue for many students. The research interest would probably not have been so great had the overall project not also involved an intervention component. The marked impact and distress reported by the current sample, suggests that sources of support for self-criticism need to be made available to students. Specifically, participants spoke about self-criticism wasting their time and energy, interfering with their relationships and productivity, resulting in negative emotions and a physical stress response, and contributing to self-damaging behaviours. In terms of offering an intervention for self-criticism, there are a number of factors that need to be considered. The ambivalence around self-criticism may mean that motivational work might be a suitable accompaniment or precursor to an intervention for self-criticism. Additionally, given evidence of the involvement of other psychological processes, such as avoidance, rumination, perfectionism and self-esteem, addressing those factors may also be a useful part of any intervention for self-criticism. The fact that participants considered self-criticism to be part of their personality and an automatic/habitual process may also lead to some resistance. Of importance would be offering a clear rationale and evidence for the possibility of change. Early intervention may be of particular benefit given evidence reported by the current participants that self-criticism was generally present in childhood and adolescence. The transition to secondary school and the onset of puberty, may be a particularly crucial time for the provision of support. Related to this, parents, caregivers and school personnel may benefit from psycho-education about the potential impact of direct and indirect criticism, as well as alternative ways of interacting and communicating with those in their care. Similarly, staff in universities should be aware of the potential adverse effects of self-criticism for students. Although university staff are most likely to notice students' self-criticism about academic work, they should be aware that this may extend to other areas of the student's life too and that they may need to signpost students for extra support. Targeting self-critical students

with the use of social media may also be a beneficial endeavour, with the aim of minimising unhelpful social comparison and any associated effects on self-esteem. Efforts such as these may help to reduce the likelihood of a possible trajectory from self-criticism to a psychiatric condition.

#### **4.5 Future research**

A number of questions remain unanswered from this study, which suggests further research would be beneficial. For example, it would be useful to conduct a larger quantitative study of self-criticism in a student sample to gain information about the prevalence of self-criticism that is associated with impaired functioning, both in students and in the general population. Quantitative methodology may help to identify whether specific sociodemographic or contextual variables are associated with increased experience of self-criticism, such as age, gender, ethnicity, type and level of course, type and location of institution. It would also be informative to conduct a similar qualitative study in the general population, to help to identify whether the experience, impact, underlying beliefs and development of self-criticism differs from that of a student population. It is also recommended to explore self-criticism in childhood and adolescence given findings here that it typically developed in early life. Longitudinal studies would help to increase understanding of the development and trajectory of self-criticism which would help inform preventative interventions. Research is also required to understand the differences and relationships between self-criticism and related constructs such as self-esteem, perfectionism and rumination. Interventions for students who already have high levels of self-criticism should be investigated. The current study was part of a larger project which indicated promising results for a six-session compassion-based intervention (Rose, McIntyre & Rimes, submitted).

#### **4.6 Conclusions**

The present study supports previous research as well as offers novel insights into the previously unstudied qualitative experience of self-criticism in a highly self-critical student sample. It provides descriptive evidence of the participants experiences and beliefs



regarding the nature, form, development origins, impact, underlying beliefs and management of self-criticism. Despite some positive beliefs about self-criticism and ambivalence about change, students also reported such negative effects that they were keen for assistance in reducing their self-criticism. University counselling services, personal tutors and others supporting students should be aware of the potential negative effects of self-criticism. Research investigating interventions to address self-criticism in students is required.

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## Appendices

1. Appendix A: Psychiatry, Nursing & Midwifery Research Ethics Subcommittee (PNM RESC) approval (18.11.2014)
2. Appendix B: Flowchart illustrating design of overall project and role of each researcher
3. Appendix C: Flowchart describing recruitment and retention of participants for the two studies
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7. Appendix G: Measures of self-criticism and associated impairment
  1. Work and Social Adjustment Scale
  2. The Habitual Index of Negative Thinking
  3. Self-Critical Rumination Scale
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10. Appendix J: Theme definitions and additional extracts

## **Appendix A: Psychiatry, Nursing & Midwifery Research Ethics Subcommittee (PNM RESC) approval (18.11.2014)**

Alexandra Rose and Ruth McIntyre  
Department of Psychology  
PO78  
Addiction Sciences Building  
Institute of Psychiatry, Psychology and Neuroscience  
King's College London  
De Crespigny Park  
London SE5 8AF

20 November 2014

Dear Alexandra and Ruth,

### **PNM/14/15-33 Self-criticism: Development of a new intervention**

#### **Review Outcome: Full Approval**

Thank you for submitting your application for ethical approval. This was reviewed by the PNM RESC on 18 November 2014. As a result, the Committee have granted full ethical approval for your study.

#### **Provisos**

Your approval is based on the following provisos being met:

1. Sections 2.2 and 2.3: Please note that ethical approval for doctoral studies is normally granted for a period of 3 years.
2. Section 7.1:
  - I. The recruitment documents should clearly indicate that the study is a research project. There, the Committee strongly recommends that paragraphs beginning with 'We are offering...' are reworded to reflect this.
  - II. The Committee recommends that participants are allowed at least 24 hours to consider whether to take part after reading the Information Sheet.
3. Information Sheet:
  - I. Remove the paragraph entitled 'What if there is a problem?'
  - II. Insert the paragraph beginning with 'If this study has harmed you in any way...' before the contact details for your academic supervisors.

You are not required to provide evidence to the Committee that these provisos have been met, but your ethical approval is only valid if these changes are made. You must not commence your research until these provisos have been met.

Please ensure that you follow all relevant guidance as laid out in the King's College London Guidelines on Good Practice in Academic Research (<http://www.kcl.ac.uk/college/policyzone/index.php?id=247>).

For your information ethical approval is granted until 20 November 2017. If you need approval beyond this point you will need to apply for an extension to approval at least two weeks prior to this explaining why the extension is needed, (please note however that a full re-application will not be necessary unless the protocol has changed). You should also note that if your approval is for one year, you will not be sent a reminder when it is due to lapse.

Ethical approval is required to cover the duration of the research study, up to the conclusion of the research. The conclusion of the research is defined as the final date or event detailed in the study description section of your approved application form (usually the end of data collection when all work with human participants will have been completed), not the completion of data analysis or publication of the results.

For projects that only involve the further analysis of pre-existing data, approval must cover any period during which the researcher will be accessing or evaluating individual sensitive and/or un-anonymised records.

Note that after the point at which ethical approval for your study is no longer required due to the study being complete (as per the above definitions), you will still need to ensure all research data/records management and storage procedures agreed to as part of your application are adhered to and carried out accordingly.

If you do not start the project within three months of this letter please contact the Research Ethics Office.

Should you wish to make a modification to the project or request an extension to approval you will need approval for this and should follow the guidance relating to modifying approved applications:

<http://www.kcl.ac.uk/innovation/research/support/ethics/applications/modifications.aspx>

Please would you also note that we may, for the purposes of audit, contact you from time to time to ascertain the status of your research.

If you have any query about any aspect of this ethical approval, please contact your panel/committee administrator in the first instance

(<http://www.kcl.ac.uk/innovation/research/support/ethics/contact.aspx>)

We wish you every success with this work.

Yours sincerely,

James Patterson - Senior Research Ethics Officer

**For and on behalf of**

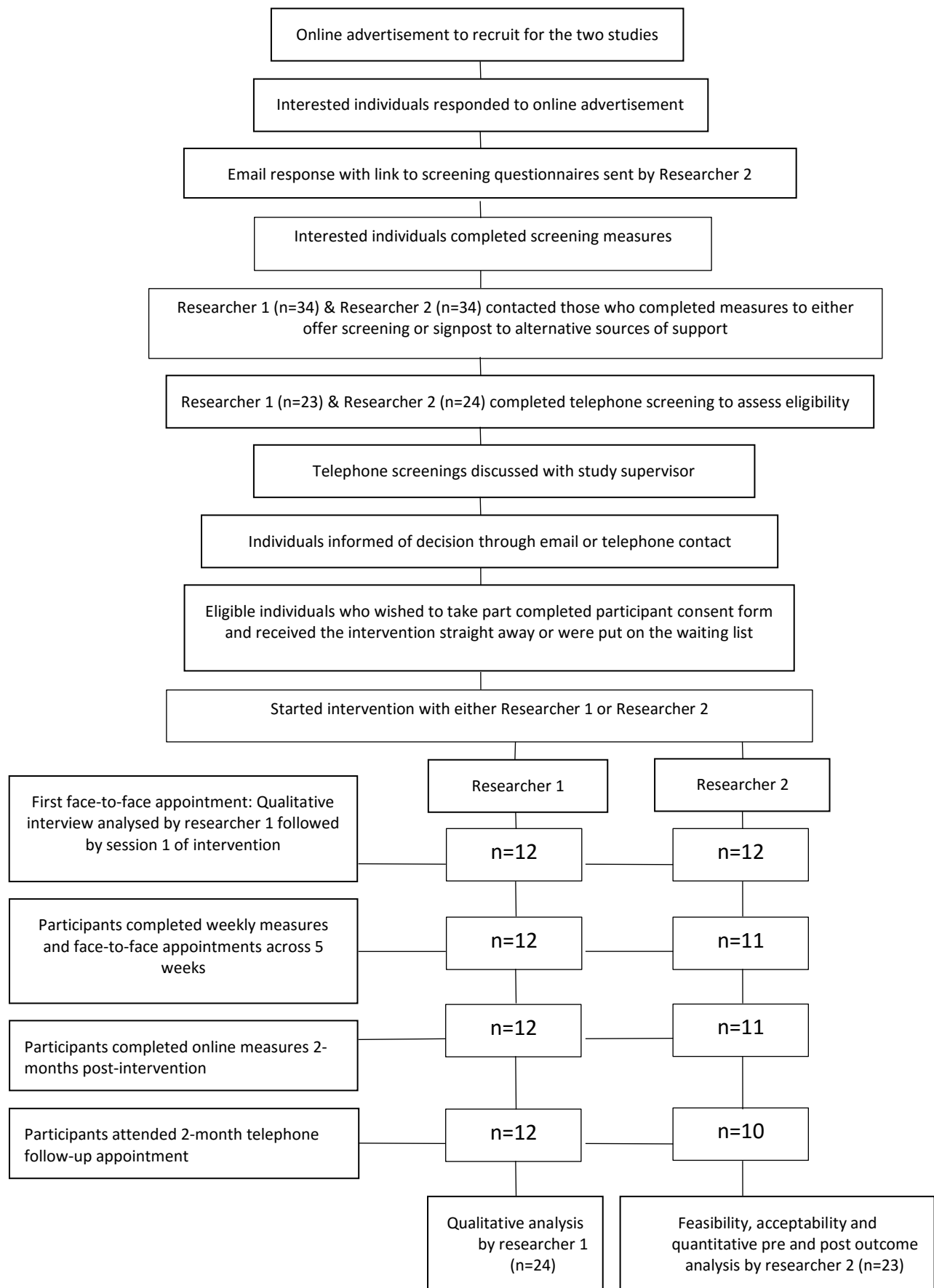
Professor Gareth Barker, Chairman

Psychiatry, Nursing and Midwifery Research Ethics Subcommittee (PNM RESC)

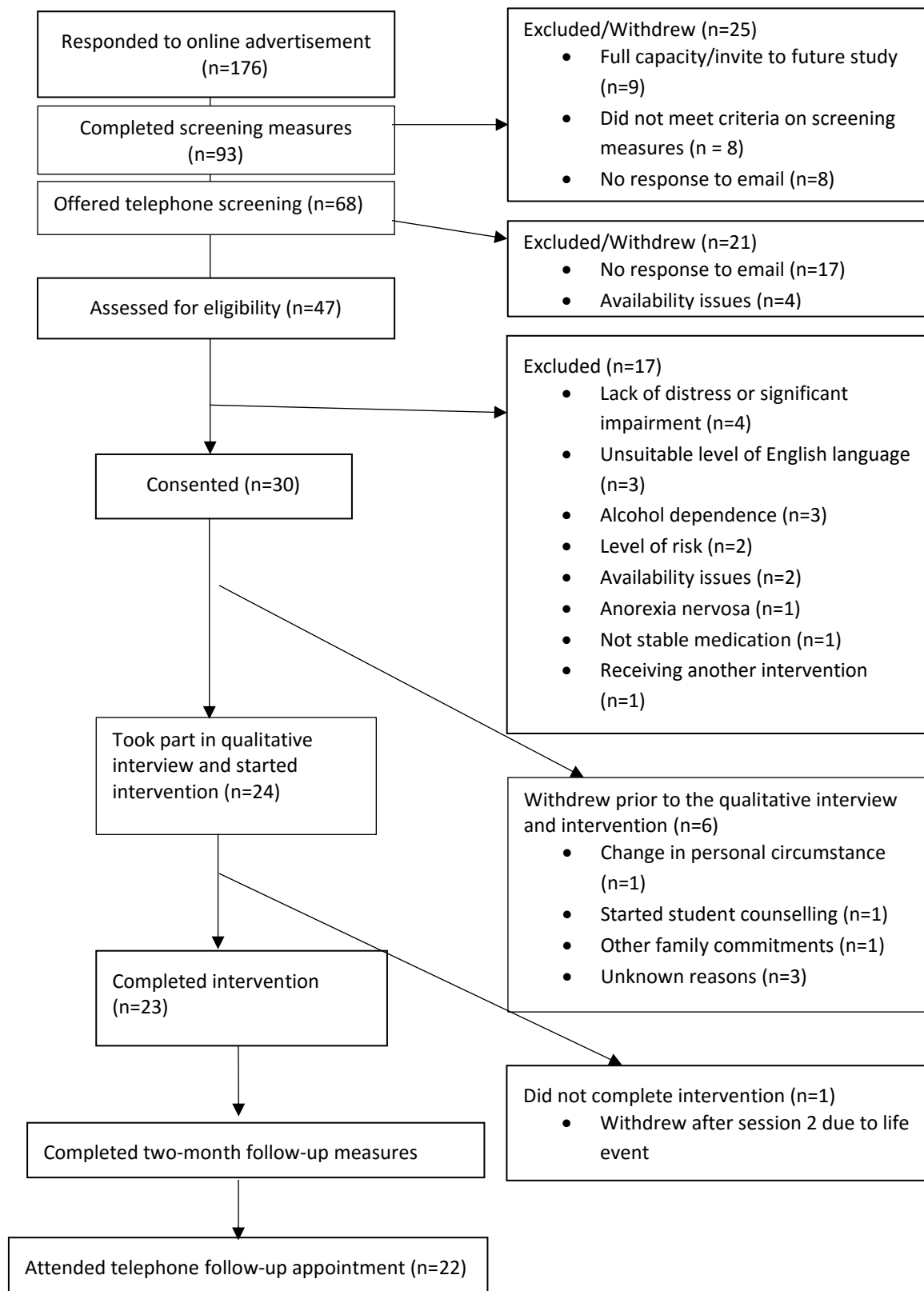
Cc: Katharine Rimes and Patrick Smith



## Appendix B: Flowchart illustrating design of overall project and role of each researcher



## Appendix C: Flowchart describing recruitment and retention of participants for the two studies



## Appendix D: Recruitment advertisement

### Self-criticism: Development of a new intervention

Advertisement for use for recruitment of volunteers for study ref: [PNM/14/15-33], approved by the Psychiatry, Nursing and Midwifery Research Ethics Sub-Committee (PNM RESC). This project contributes to the College's role in conducting research, and teaching research methods. You are under no obligation to reply to this email, however if you choose to, participation in this research is voluntary and you may withdraw at any time.

ARE YOU VERY SELF-CRITICAL?

- *Do you notice lots of self-critical thoughts?*
- *Do you become easily disappointed with yourself?*
- *When you make mistakes are you very hard on yourself?*
- *Do you go over the things you don't like about yourself in your head?*
- *Do you find it difficult to control your self-critical thoughts?*
- **Is this something you would like to change?**

We are carrying out a research study, where you could be invited to take part in an interview/assessment plus 5 individual sessions to help you develop strategies to reduce self-critical thinking.

You could be eligible to take part in our study, if you:

- *Feel that your self-criticism is causing you significant distress or causing you problems in one or more areas of your life, including work, studying, relationships or body image.*
- *Are an undergraduate or postgraduate student.*

FOR FURTHER INFORMATION ABOUT THE STUDY (WITH NO OBLIGATION TO TAKE PART), PLEASE CONTACT ALEXANDRA ROSE (ALEXANDRA.A.ROSE@KCL.AC.UK) OR RUTH MCINTYRE ([RUTH.R.MCINTYRE@KCL.AC.UK](mailto:RUTH.R.MCINTYRE@KCL.AC.UK)).

## INFORMATION SHEET FOR PARTICIPANTS

### YOU WILL BE GIVEN A COPY OF THIS INFORMATION SHEET

#### **Self-criticism: Development of a new intervention**

We would like to invite you to participate in this postgraduate research project. You should only participate if you want to; choosing not to take part will not disadvantage you in any way. Before you decide whether you want to take part, it is important for you to understand why the research is being done and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information.

#### **What is the purpose of this study?**

This study is investigating a new intervention for students who are looking for help to reduce their self-critical thinking. This study is part of a doctoral research project. This study is being conducted by Alexandra Rose and Ruth McIntyre, clinical psychologists in training at the Institute of Psychiatry, Psychology and Neuroscience, together with Dr Katharine Rimes and Dr Patrick Smith, honorary consultant clinical psychologists and senior lecturers at King's College London.

#### **Why have I been invited to take part?**

We are recruiting KCL undergraduate and postgraduate students who have responded to advertisements for the study.

#### **Am I eligible to take part?**

You may be eligible to take part if you tend to be self-critical and you want help to reduce this, because it causes you distress or other problems. This will be assessed by your scores on questionnaires and a discussion with one of the researchers over the telephone.

Self-criticism can affect various different areas of our lives including work, studying and relationships. Participants must be aged at least 18 years of age and be an undergraduate or postgraduate student at KCL. There are certain reasons why people may not be suitable. This includes having current problems that would interfere with one's ability to benefit from such help, for example, substance dependence and anorexia nervosa. If you are not eligible to take part in the study the researcher will explain this to you at the time of the telephone screening.

If you take part in this study you would need to be available to take part in an in-depth interview and 5 individual sessions.

#### **Do I have to take part?**

It is up to you whether or not you take part. If you do decide to take part, you will be asked to sign a consent form. Having signed the consent form, you are still free to withdraw your participation without giving a reason, up until the point the data has been analysed. For

information from your interview, this will be a month after the interview, whereas the questionnaire data can be withdrawn up until December 2015. A decision to withdraw, or a decision not to take part, will not affect any other care that you may receive, such as through the NHS or the student support services.

### **What will happen to me if I take part?**

The first thing you will be asked to do will be to take part in a brief telephone screening; prior to the telephone call you will be emailed a link to complete some brief questionnaires about your style of thinking and the impact this has on your life. The purpose of this is to determine whether this intervention would be helpful for you. Your answers to these questionnaires will be scored and based on this you will be invited to take part in the intervention. During the telephone screening you will have the opportunity to ask any questions that you might have about the project. We will also ask for you to provide your GP details. Your GP will only be contacted if the clinicians feel concerned that there is a risk to your safety or the safety of other people. The brief telephone screening may take up to 45 minutes.

Once you are invited to take part in the intervention, you will be asked to sign and return the consent form. Prior to the first session you will be emailed a link to a set of questions, which you will be asked to complete in your own time. During the first session you come to you will be asked a number of questions about your experiences of self-criticism. This will help to inform subsequent sessions. The content of this session will be audio-recorded and transcribed onto a password-protected computer. It will also be anonymised and combined with other people's responses to help us better understand the experience of self-criticism. The focus of the five subsequent sessions will be on developing strategies to better manage your self-critical thoughts drawing on techniques from self-compassion training. These sessions will also be audio-recorded. You will also be asked to complete a series of questionnaires at different time-points during the intervention, including mid-way, at the end and two months after the intervention.

### **New intervention to reduce self-criticism**

The help provided will take your preferences into account and will draw on elements of cognitive behaviour therapy and self-compassion training.

Being self-compassionate means adopting the qualities of kindness, warmth, strength and non-judgement and directing them towards the self. Self-compassion is a skill that we can develop further.

You will be taught a range of exercises and strategies to reduce your self-critical thinking and increase your self-compassion. These sessions will help you to become aware of and to understand why your self-criticism has developed. You will be given information about the benefits of self-compassion.

The benefit of having individual sessions is that the intervention will be targeted to suit your individual needs. You will also be able to troubleshoot any difficulties you may encounter in a safe and confidential space. You will only be encouraged to use methods that feel ok for you. As this is a new intervention we are keen to receive feedback at all stages.

**Data and audio-recording**

In order to be able to analyse the data from the study, we will ask for your consent for members of the research team to have access to your questionnaire responses. All of your completed questionnaire responses will be anonymised by labelling them with a number rather than with your name. They will be stored securely at Kings College London. We will also ask your permission to audio record the sessions, for supervision purposes and so that we can check that the sessions were being run according to the research protocol. The audio-recording of the first interview session will be transcribed and stored electronically on a password-protected computer. All audio-recordings will be deleted once they have been transcribed or used for supervision purposes. Interview content will be analysed to identify any common themes that emerge. In reporting the findings, quotes may be used, however, these written/spoken reports will not contain any identifying information about those who take part.

**Confidentiality – who will know that I am taking part in this study?**

All information relating to you participating in this study will be securely stored, either on a password-protected computer at King's College London, or locked in a filing cabinet. No completed questionnaires will be labelled using your name or any other identifiable information. Instead, each questionnaire will be labelled with a unique identification number. The only people who will have access to your data from the study will be the research team.

**Other forms of help for self-criticism**

We ask that you do not have any other form of help (e.g. counselling) for your self-criticism during the time that you are attending the intervention sessions, otherwise we will not be able to tell whether there has been any impact of the help that we have provided. If you take part, you can continue taking any medication. If you are taking antidepressant medication, you need to have been on a stable dose for at least three months before starting this study.

You are free to choose not to participate in this research trial. If you do not want to participate in the trial, you will continue to be able to seek other available help.

**What are the possible risks or disadvantages of taking part?**

As with any form of help that focuses on psychological issues, you may sometimes feel emotionally distressed. The clinicians have experience in delivering one-to-one therapy and will help you to develop methods for managing distress.

A possible disadvantage is the inconvenience of the questionnaires and interviews. These have been kept to a minimum and will be done in a way that is as convenient for you as possible. It is also possible, though unlikely, that you might experience some emotional distress as a result of completing some of the questionnaires. Support will be available to you in this event.

**What are the potential benefits of taking part?**

If you decide to take part than you will be offered help for negative effects of self-criticism. Whilst we expect this form of help to be of benefit to you, we cannot guarantee this. If of interest, we can send you a copy of the final report on the research study.

**What will happen to the results of the study?**

The results of the study will be written up as part of the researchers' theses, and submitted to a peer reviewed journal and a conference.

**What will happen if I don't want to carry on with the study?**

You are able to withdraw from treatment or the study at any stage. You may decide that you would like to continue with the intervention, but not complete the questionnaires and interviews. If you withdraw from treatment, with your permission, we would also like you to complete post-intervention questionnaires despite you not completing the individual sessions. However, you will retain the right not to do this if you so choose.

If you withdraw from the study, you may also request that your interview data is removed from this study; this will be possible until one month after the interview.

**Ethical Approval**

This study has been approved by King's College London Psychiatry, Nursing and Midwifery Research Ethics Subcommittee (PNM RESC) – Reference number [PNM/14/15-33]

**For further information**

If you have any questions or would like any further information about the study, please do not hesitate to contact Alexandra Rose ([Alexandra.a.rose@kcl.ac.uk](mailto:Alexandra.a.rose@kcl.ac.uk)), Ruth McIntyre ([ruth.r.mcintyre@kcl.ac.uk](mailto:ruth.r.mcintyre@kcl.ac.uk)), Dr Katharine Rimes ([katharine.rimes@kcl.ac.uk](mailto:katharine.rimes@kcl.ac.uk)) or Patrick Smith ([Patrick.Smith@kcl.ac.uk](mailto:Patrick.Smith@kcl.ac.uk)). If this study has harmed you in any way, you should contact any of the above-named people. If you remain unhappy, you have the right to complain to King's College London about any aspects of the way you have been approached or treated during the course of this study.

**It is up to you to decide whether to take part or not. If you decide to take part you are still free to withdraw from the study at any time and without giving a reason.**

*Thank you for taking time to read this information pack.*

## Summary

- Participation is voluntary. You have the right to choose not to participate, or to stop participating in the trial at any point and without consequence.
- All the information you provide throughout the trial will be completely confidential. However, if a member of the team is given reason to believe that your health may be at risk or you may harm yourself or others, we may contact your GP or other relevant parties.
- This information sheet is for you to keep. If you decide to participate, you will also be provided with a copy of the signed consent form.
- For any further information, please contact Alexandra Rose ([Alexandra.a.rose@kcl.ac.uk](mailto:Alexandra.a.rose@kcl.ac.uk)), Ruth McIntyre ([ruth.r.mcintyre@kcl.ac.uk](mailto:ruth.r.mcintyre@kcl.ac.uk)) or Dr Katharine Rimes ([katharine.rimes@kcl.ac.uk](mailto:katharine.rimes@kcl.ac.uk)).



## Appendix F: Participant consent form

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Study: Self-criticism: Development of a new intervention



King's College Research Ethics Committee Ref: PNM/14/15-33

Thank you for considering taking part in this research. The person organising the research must explain the project to you before you agree to take part. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Please tick  
or initial

I confirm that I understand that by ticking/initialling each box I am consenting to take part in the study. I understand that it will be assumed that unticked/initialled boxes mean that I DO NOT consent to take part in the study.

☐

1. \*I confirm that I have read and understood the information sheet dated for the above study. I have had the opportunity to consider the information and asked questions which have been answered satisfactorily. ☐
2. \*I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. Furthermore, I understand that I will be able to withdraw my questionnaire data up to December 2015 and my interview data up to one month after the interview. ☐
3. \*I consent to the processing of my personal information for the purposes explained to me. I understand that such information will be handled in accordance with the terms of the UK Data Protection Act 1998. ☐
4. \*I understand that my information may be subject to review by responsible individuals from the College for monitoring and audit purposes. ☐
5. I understand that confidentiality and anonymity will be maintained and it will not be possible to identify me in any publications ☐
6. I agree that the research team may use my data for future research and understand that any such use of identifiable data would be reviewed and approved by a research ethics committee. (In such cases, as with this project, data would/would not be identifiable in any report). ☐
7. I understand that the information I have submitted will be published as a report and I could ask to receive a copy if I wish. ☐

8. I consent to my interview being audio/video recorded.

☐

\_\_\_\_\_  
Name of Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

## Appendix G: Measures of self-criticism and associated impairment

### Work and Social Adjustment Scale (WASAS)

People's problems sometimes affect their ability to do certain day-to-day tasks in their lives. To rate your problems look at each section and determine on the scale provided how much your problem impairs your ability to carry out the activity. This assessment is not intended to be a diagnosis. If you are concerned about your results in any way, please speak with a qualified health professional.

If you're retired or choose not to have a job for reasons unrelated to your problem, tick here ☐

0	1	2	3	4	5	6	7	8
Not at all		Slightly		Definitely		Markedly		Very severely

1.	Because of my self-critical thinking my <b>ability to work</b> is impaired.  '0' means 'not at all impaired' and '8' means very severely impaired to the point I can't work.	
2.	Because of my self-critical thinking my <b>home management</b> (cleaning, tidying, shopping, cooking, looking after home or children, paying bills) is impaired.	
3.	Because of my self-critical thinking my <b>social leisure activities</b> (with other people e.g. parties, bars, clubs, outings, visits, dating, home entertaining) are impaired.	
4.	Because of my self-critical thinking my <b>private leisure activities</b> (done alone, such as reading, gardening, collecting, sewing, walking alone) are impaired.	
5.	Because of my self-critical thinking my ability to form and maintain <b>close relationships</b> with others, including those I live with, is impaired.	

## The Habitual Index of Negative Thinking (HINT)

Occasionally we think about ourselves. Such thoughts may be positive, but may also be negative. In this study we are interested in *negative* thoughts you may have about yourself. Please indicate how much you agree or disagree with the following statements.

1.	<i>Thinking negatively about myself is something...</i>  I do frequently	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

2.	<i>Thinking negatively about myself is something...</i>  I do automatically	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

3.	<i>Thinking negatively about myself is something...</i>  I do unintentionally	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

4.	<i>Thinking negatively about myself is something...</i>  That feels sort of natural to me	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

5.	<i>Thinking negatively about myself is something...</i>  I do without further thinking	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

6.	<i>Thinking negatively about myself is something...</i>  That would require mental effort to leave	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

7.	<i>Thinking negatively about myself is something...</i>  I do every day	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

8.	<i>Thinking negatively about myself is something...</i>  I start doing before I realize I'm doing it	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

9.	<i>Thinking negatively about myself is something...</i>  I would find it hard not to do	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

10.	<i>Thinking negatively about myself is something...</i>  I do not do on purpose	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

11.	<i>Thinking negatively about myself is something...</i>  That's typically "me"	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

12.	<i>Thinking negatively about myself is something...</i>  I have been doing for a long time	1	Strongly disagree
		2	Disagree
		3	Neither agree nor disagree
		4	Agree
		5	Strongly agree

## Self-Critical Rumination Scale (SCRS)

1.	My attention is often focused on aspects of myself that I'm ashamed of	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree
		4	Disagree
		5	Strongly Disagree
2.	I always seem to be rehashing in my mind stupid things that I've said or done	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree
		4	Disagree
		5	Strongly Disagree
3.	Sometimes it's hard for me to shut off critical thoughts about myself	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree
		4	Disagree
		5	Strongly Disagree
4.	I can't stop thinking about how I should have acted differently in certain situations	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree
		4	Disagree
		5	Strongly Disagree
5.	I spend a lot of time thinking about how ashamed I am of some of my personal habits	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree
		4	Disagree
		5	Strongly Disagree
6.	I criticize myself a lot for how I act around other people	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree
		4	Disagree
		5	Strongly Disagree
7.	I wish I spent less time criticizing myself	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree
		4	Disagree
		5	Strongly Disagree
8.	I often worry about all of the mistakes I have made	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree
		4	Disagree
		5	Strongly Disagree
9.	I spend a lot of time wishing I were different	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree
		4	Disagree
		5	Strongly Disagree
10.	I often berate myself for not being as productive as I should be	1	Strongly agree
		2	Agree
		3	Neither agree nor disagree

		4	Disagree
		5	Strongly Disagree

## **Appendix H: Interview schedule**

*As interviews are to be semi-structured the following topics/questions serve as a guide for discussion. The purpose is to develop a phenomenological understanding of self-criticism in a student sample.*

### **Open Interview**

#### Introductions

- *Start with introductions*
- *It's great to meet you in person*

#### Questionnaires & Written Consent

- *Completed questionnaires?*
- *Signed consent form?*

#### Confirm consent to participate and audio-record

- *As we said on the phone, the first part of this session will in an in-depth interview about your experiences of self-criticism. This part will be audio-recorded and then later transcribed onto a password-protected computer. Your answers will be completely anonymised, and will be combined with other people's responses to help us better understand the experiences of self-criticism.*
- *Is that ok?*

#### Remind about limits of confidentiality and right to withdraw

- *Also before we start just to remind you about confidentiality – all the information relating to you participating in the study, including anything you say today, will be kept confidential within the research team*
- *The only exception to this is if we thought you were at risk to either yourself or to someone else, in this case we would have a duty of care to involve the appropriate services. If this were the case we would endeavour to speak to you about this before breaking confidentiality.*
- *Are you happy to proceed on that basis?*

#### Practicalities of the appointment



- *The first part will be the interview – this will last approximately 1 hour. During this hour I will ask lots of questions about different aspects of your experience of self-criticism. It might feel strange but I will be just listening to your answers, without providing any feedback at this point. This is because I don't want what I say to influence your responses in any way.*
- *During the second half of today's appointment we'll discuss what you have said in more detail, and start the intervention.*
- *Please let me know if you would like a break at any point.*
- *The toilets are...*

Any questions before we begin?

#### **Pre-interview Questions to Develop Rapport**

- Where are you from?
- What course are you studying?
- What do you like to do in your spare time?

*NB only begin recording after these questions to minimise recordings having any identifiable information*

## Possible Topics/Questions for Discussion

### General/Theme

- Tell me about your self-criticism i.e. what are you typically self-critical about?
- [Prompt: any other areas of your life that you are self-critical about e.g. uni, work, friends, family, dating, body image? Ask for examples/details about each area]
- What aspects of yourself or areas of your life are you MOST self-critical about?
- What are you are NOT self-critical about?

### Current triggers and amounts

- *Triggers:* When is your self-criticism triggered/what kinds of things trigger your self-criticism?
- [Prompt: is your self-criticism triggered by particular situations or being around particular people?]
- In what way does your emotional state influence your self-criticism?
- [Prompt: e.g. feeling anxious, sad, happy?]
- In what way does your physical state influence your self-criticism?
- [Prompt: e.g. feeling tense, in pain, tired?]
- In a typical day, how often are you self-critical? How much of the time?

### Consequences of self-criticism for mood, behaviour and sense of self-worth

- In what way is self-criticism affecting your life? Ask for examples/details.
- What are the advantages of being self-critical?
- *[Prompt: What goal or purpose does your self-criticism have? How does it help you? E.g. is it to try to make you a better person or try harder in that area? Is there an element of self-punishment?]*
- What are the disadvantages of being self-critical?
- *[Prompt: E.g. own needs and goals not met, resentment, exhaustion, isolating, low mood, anxiety, others don't know true you, restricted lifestyle, hyper-vigilance, less able to enjoy the moment]*
- How do you feel when you are being self-critical? *[Prompt for specific emotions that are experienced including shame, embarrassment, guilt, low mood, anxiety, cut-off / numb / nothing?]*
- What do you think is the nature of the relationship between your self-criticism and your self-esteem / self-confidence?
- What effect does it have you on physically when you are self-critical?
- When you are feeling self-critical, how does it affect how you behave towards yourself? And other people???
- *Responses:* What do you do when you notice that you are being self-critical?
- *[Prompt – For example, might you try to deliberately continue with it, or stop it, or work out how to do better next time, or deal with it in any other way?]*
- Do you ever try to distract yourself or change how you are feeling? *(Prompt: E.g. by using things like alcohol, food, cigarettes, drugs, sex, socialising, exercise, internet, reading, self-harm? Tell me more...)*
- *If not answered from previous questions:* What factors lead to the self-criticism stopping? *[If prompt needed – either something that you to stop it or distract yourself from it or maybe external factors lead it to stopping?]*
- How do you feel about the idea of reducing your self-criticism? What, if any, concerns do you have? Any sense of conflict/resistance?
- How much, if any, self-criticism would you like to keep? What would a healthy amount of self-criticism be like?

### Current experience of self-critical thinking

- *Form*: What does your self-criticism look like? How would you describe your self-criticism?
- [Prompt: Is your self-criticism fully verbal e.g. full sentences or more of a 'general feeling? What kind of images, if any, do you have when you are self-critical?]
- *Even if you don't actually experience the self-criticism in words, if you did, what would it look like?*
- [Prompt – When you are feeling self-critical, if you were asked to complete the sentence “I am ....” what would you say?]
- *Content*: does your self-criticism tend to be about specific aspects of yourself or is more about yourself generally as a person? Tell me more... [Ask about specific examples of self-critical thoughts if participants wishes to share this – what kind of thoughts do you have?].
- *If global*, how much does it feel like you like/dislike yourself?
- *If global*, how much does it feel like you are good enough/not good enough? How much does it feel like you are loveable/unloveable or acceptable/unacceptable?
- How much is your self-criticism focused on your own view of yourself or on how others perceive you? How do you think other people view you? How do you view yourself? Any fears or concerns about how you are seen? [Have external and internal fears in mind]
- *Awareness*: When you are being self-critical how aware are you of it? How much does it occur in the background/outside of your full awareness?
- *Automaticity*: How automatically does it happen i.e. without needing any effort, whether you like it or not? (How much of the time is it like this?)
- *Controlled processing*: How much do you deliberately do it through a conscious decision? (How much of the time is it like this?)
- *Controllability*: Once it has started, how much control do you have about making it stop?

### Early experiences & development of self-criticism

- What is your earliest memory of being self-critical? How old were you then?
- When were you first self-critical about (refer to each aspect of their life they are self-critical about e.g. academic, social, body image)? *If onset of self-criticism varied across area*: what might have made you self-critical about X at this time?
- Why do you think you are self-critical/what is your understanding about why you are self-critical? (Ask for details and keep prompting for other reasons...)
- How much do you think that genetics/hereditary factors might have influenced your self-criticism?

- How much do you think that self-criticism is part of your personality? (Ask for details – e.g. do you think personality factors can be changed?)
- How much do you think that self-criticism is something that you learned?
- What might be some early influences on your self-criticism?
- *If not mentioned:* How might your experiences with other people have influenced your self-criticism e.g. parents, grandparents, siblings, aunts, uncles, cousins, neighbours, friends, other children, teachers, people you don't know well etc.
- [Prompt e.g. did you observe other people being critical of themselves when you were growing up? Tell me more...
- How much were other people critical of you when you were growing up?
- What is your relationship like with these people now??]
- In what way might the atmosphere at home have influenced your self-criticism? What was the atmosphere like at home when you were growing up?
- [Prompt: How warm and supportive was the home environment?
- If you did something wrong, how did your parents/other family members respond? What kinds of things did they say or do? How did they respond if you did something well?]
- In what way might school have influenced your self-criticism? What was it like at school?
- [Prompt: How critical or supportive were your teachers/other school staff? What was the school environment like e.g. competitive/critical or accepting? How did teachers/other school staff respond if you misbehaved or made mistakes or got lower than expected grades? How did they respond if you did well? Did you have any difficulties at school – learning or otherwise? Tell me more...]
- What were your experiences with other children like – at school, in the neighbourhood, other places? Did you experience any difficulties e.g. bullying or any loss of friendships?
- You don't have to tell us any details that you don't want to, but did you experience any significant traumatic events when you were growing up (e.g. death of parent or sibling, divorce/separation, hospitalisation, sexual or physical abuse) or as an adult? How might these experiences have influenced your self-criticism?
- In what ways were other people kind to you e.g. family, neighbours, teachers etc.? Was there someone who was always kind to you? What is your earliest memory of someone else being kind to you?
- Any other thoughts about why you are self-critical?

### Ability to self-soothe and be self-compassionate

- When you notice you are being self-critical, do you ever try to be kind to yourself instead?  
How?
- If you are feeling distressed, what do you do to soothe/comfort/reassure?
- If you do try to be kind to yourself, what happens? (e.g. does it work, make you feel better about yourself?)
- Are there people in your life who are kind to you now? In what ways?
- When you are feeling self-critical, do you try to get support or reassurance from other people or keep it to yourself?
- What are your strengths?

### Other

- If you could wave a magic wand and you were no longer self-critical what would your life look like?
- What are the main things that you would like to achieve through these sessions?
- Is there anything else you think I should be asking or you would like to say?

### **Close interview**

- Thank for answering those questions
- Switch off audio-recorder

## Appendix I: Extract demonstrating thematic coding

### Key:

I = Interviewer, R = Respondent, SC = self-criticism

Data from Interview with Participant 75	Initial codes	Theme/Subtheme
I: <i>So if you could start by telling me about your self-criticism, so what are you typically self-critical about?</i>	-	-
R: I'm self-critical about my academic ability, particularly in comparison to other people's, which I realise is not very helpful but I still do it. I'm self-critical about my appearance and kind of tied into that my age. I'm self-critical about the fact that I still smoke and I should really not do that and I have major problems, I think, with imagining how other people are judging me and then using that too as a stick to beat myself with. So I'm quite good at thinking they think I talk too much and therefore they don't like me because I'm a person who talks too much and that's a very unlikeable trait. Even if I don't really think it is an unlikeable trait I can still beat myself up for it because if I think other people... it gets very complicated with your kind of guessing how other people are perceiving you and then responding to that inside your head.	SC about academia  Comparison to others  SC despite unhelpful  SC about appearance  SC about smoking  Perceived judgement triggers SC  SC about talking too much  Perceived unlikeable traits  Perceived judgement triggers SC	1/Specificity of SC  5/Comparison to others  6/Difficulty controlling SC  1/Specificity of SC  1/Specificity of SC  5/ Fear of negative evaluation  1/Specificity of SC  5/ Fear of negative evaluation  5/ Fear of negative evaluation
I: <i>Okay, so what kind of things will you say to yourself when you're being self-critical?</i>	-	-
R: It's really harsh, it's the kind of things that I would never, ever say to anyone else even if I really was angry. I'll say that you're fat and you're disgusting and that you've got... it's repulsive that you have no self-control. Why did you eat that?	Harsh, never say to anyone else  Fat and disgusting	3/Harshness of SC  3/Harshness of SC 3/Harshness of SC

<p>You weren't even hungry, that's pathetic, you should know better. That's the level and then academically quite often I will just be like everyone else is better than you, they can all do it and you can't do it. It's because you're too stupid, you're too old, you don't listen, you don't concentrate. Anything I could think of that could potentially be a reason then I'll throw that at myself. So yes it's relentlessly negative.</p>	<p>Repulsive and no self-control</p> <p>Pathetic, should know better</p> <p>SC about academia</p> <p>Everyone else is better</p> <p>Too stupid, old, don't listen, don't concentrate</p> <p>Anything could trigger SC</p> <p>Relentlessly negative</p>	<p>3/Harshness of SC</p> <p>1/Specificity of SC</p> <p>5/Comparison to others</p> <p>3/Harshness of SC</p> <p>1/Specificity of SC</p> <p>3/Harshness of SC</p>
<p><i>I: What are you most self-critical about?</i></p>	<p>-</p>	<p>-</p>
<p>I think that I'm just fundamentally not really a good enough person. I think that all of those things that I've talked about reflect the fact that I'm not a good enough person, that I just don't care enough about other people, that I don't care enough about myself. That I don't take care of myself properly, it's kind of like a whole host of things but it all boils down to the fact that basically I'm not trying hard enough or I'm not good enough as I am.</p>	<p>Fundamentally not good enough person</p> <p>Don't care enough about others &amp; self</p> <p>Don't take care of self</p> <p>Whole host of things</p> <p>Boils down to not good enough</p> <p>Not trying hard enough</p>	<p>5/Fear of not being good enough</p> <p>5/Fear of not being good enough</p> <p>4/Self-damaging behaviours</p> <p>1/Specificity of SC</p> <p>5/Fear of not being good enough</p> <p>5/Fear of failure and perfectionism</p>



## Appendix J: Theme definitions and additional extracts

Theme	Definition	Example Quotes
<b>Theme 1: It can be about anything and everything</b>	<p>This theme is about the specificity of self-criticism. It includes examples of the various ways in which the sample described being self-critical e.g. academia, relationships, appearance. It also highlights how self-criticism can spiral or snowball out of control. This theme also refers to emotional and physical influences on the experience of self-criticism.</p>	<p>“There’s always cause to self-criticize, I mean I’m not saying one should always self-criticize because that’s what I’m doing and it’s probably not that good but yes, there’s always something you could be self-critical about” (MUG33)</p> <p>“This year it’s academic so...about things I’ve done, so questions I ask in class, coursework I submit, erm being annoyed at myself for not understanding things that other people seem to pick up on quite easily, annoyed at myself when I’m not working erm. I get frustrated at myself because I seem to spend a lot of hours doing things but don’t feel like I’m as productive as I should.” (FPG5)</p> <p>“I lose these friendships I build up and then I’m like, ‘You’re so awful. Why can’t you just keep in touch?’... my friends I went to school with for A Level – the group I was in, they’re all really, really good friends still and I’m not, I’m like, ‘Why am I the weirdo? Why am I the freak?’ and it’s because I haven’t put the effort in and I know that and then that reflects back at me.” (FPG55)</p> <p>“When I’m in a bad mood generally...there’s a high chance of being self-critical... even if nothing is wrong or if I don’t have any problem... if I’m in a bad mood generally, I will start, like, self-criticising” (FUG41)</p> <p>“If I don’t get enough sleep, that doesn’t help, if I’m tired... I can feel it in my mood the next day and in my thoughts, and it can be anything, just something someone says, I might misinterpret it</p>

		and think, 'They didn't like you, 'cause they were saying that' or then think, 'Of course they don't like me, because of X, Y and Z'" (FPG20)
<b>Theme 2: It's been around for a long time</b>	<p>This theme is about the development and onset of self-criticism and its associated constructs. It includes examples of early experiences of self-criticism as well as possible influences namely family and social environment. This theme also refers to the development of high standards.</p>	<p>"It's just been there. It's just what I do. It's just me [laughter]...It's been a part of me since I can remember...I can't, I can't remember a time where I, I, I haven't felt this way." (FPG355)</p> <p>"My family just like draws attention to appearance all the time, like my grandparents...it's kind of like they want you to feel the best you can, but then they also like draw attention to all your little faults, so I think I have like a bit of anxiety or self-criticism about appearance, like just skin and like generally maybe weight a little bit as well, but I think my cousin's been more negatively affected because she was overweight, but like she had her attention constantly drawn to it, and now she's anorexic" (FUG99)</p> <p>"I learnt that - you couldn't be up yourself. You had to be critical of yourself. That's the culture. You couldn't say, 'I'm good', ' at any point. It's tall poppy syndrome.... Tall poppy syndrome. Cut down. If someone stands up, you cut them down. That's part of the culture there." (FPG43)</p> <p>"Our school very much lauded the best students, not the most intelligent or anything, the best performing. So, when I didn't get into Oxford, all the Oxbridge people who did get in had their photo taken, had a special dinner, had interviews, were showcased on the website, had special photoshoots, a special ceremony at school." (FUG99)</p>
<b>Theme 3: It's an automatic way of thinking for me</b>	<p>This theme is about the process, form and frequency of self-criticism.</p>	<p>"Sort of vocal sentences, like my own thoughts kind of just criticizing me, I sort of just hear my own voice in my head, like 'For goodness sake,</p>

	<p>It refers to what the self-criticism looks like for this sample as well as how much of the time this sample described being self-critical. This theme also includes detail about the harshness of self-criticism as well as the tendency for participants to blame themselves. It is also about the belief that self-criticism is objective or truthful.</p>	<p>you've done this again, you stupid person, why did you do that?' So it's more like thoughts than a feeling, like an internal kind of monologue" (FPG20)</p> <p>"I mean it's like nearly sub-conscious like it kind of just flashes through your brain and is gone again, but I would say like 50, maybe like 80-100 times a day. It is quite relentless. A lot of the time it just kind of comes in and goes again. It's not like I dwell on it, it's just a kind of background, always there thing but actual times when I think, 'you shouldn't have done that, that was wrong, that was crap', is really all the time, often, often" (FPG75)</p> <p>"I always kind of catch myself being really harsh and being really judgmental in a way that I would never be with anybody else, and so I find it quite upsetting, the way that I don't treat myself kind of the same I would treat other people." (FPG12)</p> <p>"I feel like I'm personally responsible for her feeling unwell, there's a lot of self-criticism about that, like it is my fault or something like that...I definitely beat myself up a lot about that, 'cause I feel maybe it was partly my fault, maybe I should've done something, someone should've noticed that she wasn't feeling well and all of those kind of things." (FPG20)</p> <p>"Like when I get compliments, I don't take them because I feel that people say things to be nice and they don't actually mean it." (FUG62)</p>
<b>Theme 4: It holds me back in life</b>	<p>This theme is about the negative impact being self-critical has on the lives of this sample. It includes</p>	<p>"I just think where all this energy and all these thoughts could be re-directed and it just constantly gets you down a lot...It definitely stops me sleeping so well, because I tend to think of all</p>

	<p>examples of how self-criticism holds participants back in their lives, wasting their time and energy. It also gives examples of avoidance and highlights how self-criticism can interfere with relationships and productivity. It also refers to the effect of self-criticism on participants' emotional and physical wellbeing and includes references to self-damaging behaviours.</p>	<p>the things I ate that day, all the things I said that day...Just the getting me down, the not sleeping, the constant stress. It's distracting me from actually getting on with what I wanna do.” (FPG61)</p> <p>“It puts me off like tutorials when everyone else has better things to say and I'm just like, 'Oh there's no point in me saying anything 'cause it's just gonna sound stupid in front of everyone else' and then with applying for internships or like different projects, committees or whatever things like that, I'm just like 'well there's no point me doing 'cause someone else is gonna get it'.” (FUG62)</p> <p>“It's a bit of a weird situation. On one hand, I'm like 'oh, I shouldn't be thinking these thoughts. I should do something. I should get [out of] the house, go for a walk, do something', but on the other hand...I isolate myself, think about it, then almost subconsciously sabotage myself by either not doing work or picking a bit of my skin until it scabs up – do you know what I mean?” (FUG99)</p>
<p><b>Theme 5: It comes down to not being good enough</b></p>	<p>This theme is about the underlying beliefs that are associated with self-criticism, in particular a feeling of not being good enough. It highlights the relationship between self-criticism and self-esteem and includes evidence of comparison to others. This theme is also about participants' fear of negative evaluation and their fear of failure. It</p>	<p>“I think that I'm just fundamentally not really a good enough person. I think that all of those things that I've talked about reflect the fact that I'm not a good enough person, that I just don't care enough about other people, that I don't care enough about myself. That I don't take care of myself properly, it's kind of like a whole host of things but it all boils down to the fact that basically I'm not trying hard enough or I'm not good enough as I am and yet however hard I work to try and be better I'm not actually getting any better.” (FPG75)</p>

	includes references to perfectionist tendencies.	<p>"I have major problems, I think, with imagining how other people are judging me and then using that too as a stick to beat myself with. So I'm quite good at thinking they think I talk too much and therefore they don't like me because I'm a person who talks too much and that's a very unlikeable trait. Even if I don't really think it is an unlikeable trait I can still beat myself up for it because if I think other people... it gets very complicated with your kind of guessing how other people are perceiving you and then responding to that inside your head." (FPG75)</p> <p>"Sometimes I think it comes from this place of I want to do the best I possibly can, I want to work hard and be kind and I want to be a good person. My parents are delightful people, I want to be as good as them, yes I just want to be a good person I think. Then I just make it so difficult for myself because I'm expecting myself to be perfect when nobody is and I don't expect that of everybody else. I'm perfectly happy for everybody else around me to make mistakes and fail at things, and be supportive and complete, but I just don't understand why I can't do it for myself" (FPG12)</p>
<b>Theme 6: It needs to be taken down a notch</b>	<p>This theme is about the ways in which participants try to manage self-criticism and its associated constructs. It highlights the challenges and barriers involved in responding differently. It also refers to participants' ambivalent feelings about self-criticism. This theme includes examples of strategies attempted, such as</p>	<p>"It depends how strong the self-criticism is. If it's like, if I'm really feeling bad, like 'oh I really should have gone' and 'it would have been something good, I would have had a good time, my friends had a good time', then I would think about it quite a bit and replay it maybe before I get to sleep and stuff like that. But otherwise, if it's just something small and minor, like... maybe if I went into the coffee shop and just ordered something and I was just a bit weird about it, then I'll just think about it just for a few seconds, then I'll just try and think about something else then." (MUG17)</p>

	<p>generating alternative perspectives, distraction and reaching out to others. It also includes participants' hopes and expectations for participating in the study.</p>	<p>"[Life without self-criticism] would be like cycling down a hill on a sunny day with the air in my face. It would be that I think, just that feeling of freedom and just being productive without the greyness. I think just feeling free and having that space to do stuff" (FPG12)</p> <p>"My only conflict would be that this is how I know myself. This is what I've been forever and that's as far as I can remember. So it would be strange not to be like this because this is just it." (FPG5)</p> <p>"I think I'm able to sort of rationalise it and... sort of understand, you know, those sorts of things, like it's a one off, it's an unnatural sort of thing, situation, and I'm sure lots of other people felt nervous and lots of other people probably felt that they didn't do that well, um, so [I] can sort of try and rationalise it but then sometimes these sort of critical thoughts kind of creep back in, and I think they linger a bit too long." (FPG70)</p> <p>"I would be very nice to find a mechanism to stop it in its tracks before it spirals into...just into kind of like the monster that it become? It would be nice to be able to recognise it and kind of go, 'Right, I see it, it's that' and just close the door on it and be able to think about something else, that would be really nice." (FPG18)</p>
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